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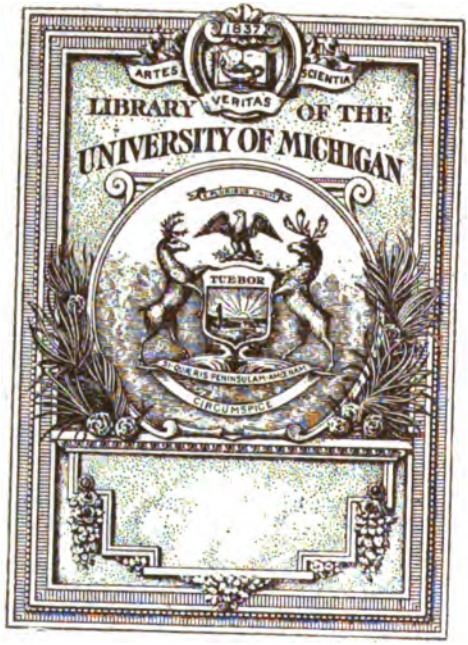
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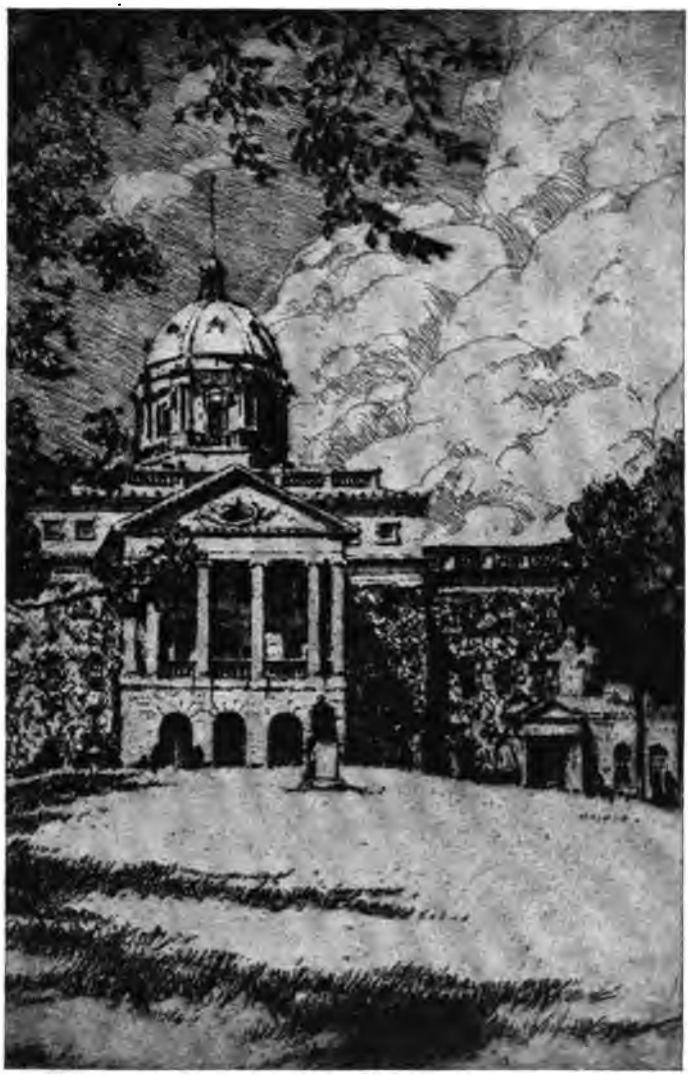

UPPER CAMPUS

From an Etching by Thomas Wood Stevens

WISCONSIN

BY

J. F. A. PYRE

NEW YORK

OXFORD UNIVERSITY PRESS

AMERICAN BRANCH: 35 WEST 32ND STREET

LONDON TORONTO MELBOURNE AND BOMBAY

1920

UPPER CAMPUS

[illegible] an Etching by Thomas Woo[illegible]

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TO MY WIFE

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I

THE STATE

WISCONSIN is one of the arbitrary units carved by federal mandate out of that wide region which, at the end of the eighteenth century, stretched in almost unchallenged wildness of prairie, swamp, and forest, from the Ohio River northward among the Great Lakes and along the Mississippi,—the region which is known in history as the Old Northwest.

The area which lay at the extreme northwest of the Old Northwest was a more obvious geographical entity than any other of the five units into which that region was politically constructed. Three-fourths surrounded by Lake Michigan, Lake Superior, and the Mississippi, it was traversed from northeast to southwest by the main primeval thoroughfare from the Great Lakes to the Father of Waters; here the Fox and Wisconsin rivers formed a continuous waterway through the interior, with only a short portage between them near their headwaters. Because of its remoteness this portion of the Northwest was the last to be settled, and before its organization was consummated a series of territorial adjustments had much narrowed its limits. From the original design, the political cleaver sheared away a broad slice on the south which, commanding the base of Lake Michigan, was destined to lie in the path of transcontinental commerce and yield to Illinois the metropolis of the Mississippi valley. Another stroke purloined for

Michigan the pine-lands and gigantic ore-fields of the Northern Peninsula. Last, an irregular piece which angled off toward the Lake of the Woods and surrounded the head of Lake Superior was taken to eke out that portion of the Louisiana Purchase allotted to the territory of Minnesota.[1]

At the outset, then, Wisconsin was trimmed of territorial grandeur and reduced to that mediocrity of fortune which belongs, by report, to the truly blest. A moderate extent and variety of material resources, a fair equilibrium of interests, a compact design, and a slight insularity of position, partly conditioned by the absence of any metropolis of staggering importance, have all worked their part in fashioning the character of the state.

Until about 1830, this glorious stretch of wilderness, long a happy hunting ground of Indian trappers and half-Indian *coureurs de bois,* continued to be their domain. The Black Hawk war of 1832 pacified for settlement the delectable valleys of the interior and disclosed their attractions to the world. The misbehavior of the Indians furnished a pretext, moreover, for exacting treaties which opened their lands to registration. The waters by which Wisconsin is surrounded on three sides, after railroads came to be relied on, tended to preserve its insularity; but at this time, they rendered it accessible. The stream of westering homeseekers, which had

[1] The amputation which did actual violence to geographic unity was that of the Northern Peninsula whose riches were but faintly realized until many years later. The loss most resented by Wisconsin settlers in the territorial period was that of the northern zone of Illinois. This region contained part of the lead mines near the Mississippi, and was in most respects similar to the contiguous portions of Wisconsin. A large portion of its inhabitants would have preferred to cast in their lot with the younger commonwealth. Agitation for its recovery continued up to the constitutional convention of 1847.

been pouring into the lower peninsula of Michigan for a decade, now streamed on across the lake or swung round its base and swiftly spread out on the prairies and in the oak-studded clearings of southern Wisconsin.

Settlement, once begun, went on with stirring activity. When, in 1836, Michigan's preparations for statehood led to the separate organization of Wisconsin Territory, about eleven thousand whites were reported as residing within the borders of the latter; but the fame spread quickly of its rolling prairies ready for the plow, its easily accessible wood and water-power, its outcroppings of limestone by stream and hillside, its incalculable possessions, northward, of pine and minerals, its smiling sky, and its salubrious air. Within four years after the territory was organized, population had increased threefold. At the end of ten years, it had increased over thirteen-fold; and this number, 155,277 in 1846, doubled in four years more,[1] and almost doubled again in another five. Stated in absolute numbers, the average annual increase was 1,300 from 1830 to 1836; 4,700 from 1836 to 1840; 21,000 from 1840 to 1846; 37,500 from 1846 to 1850; 49,400 from 1850 to 1855. Thus, in the fifteen years between 1840 and 1855, over half a million souls occupied the untamed land or were born upon it. A state constitution had been drafted in 1846, but rejected by the people; a second was promptly approved, and Wisconsin entered the Union (1848).

[1] According to the U. S. Census of 1850, the highest ratio of increase, by decades, had been those of Michigan (1830-40), 575%; Indiana (1810-20), 510%; and Ohio (1800-10), 408%. These were analogous decades in the settlement of the respective territories. Wisconsin's increase (1840-50) was, according to the same authority, 891%. (According to my own computation, this should be 1001%.) The nearest rival in the same decade was Iowa, 347%. Only one other territory (Arkansas, 110%) exceeded 100% of increase during this decade.

Numerous causes besides the physical attractiveness of the newly opened territory contributed toward this unprecedented rapidity of colonization. Transportation had made great strides during the decade immediately preceding 1840. There was now a considerable fleet of steamboats on the Great Lakes, with ports at Milwaukee and other points on the west shore of Lake Michigan. On the Mississippi side, the lead mines had carried on a thriving steamboat trade for some time. Railroads were progressing in the East and, shortly after 1850, they penetrated into Wisconsin itself, pushing from the lake ports inward. The financial chaos following the panic of 1837 tended to uproot many families in the older states, many of them, in fact, but lightly attached to the soil. It was the era of short specie, wildcat banks, exemptions, and repudiation of state debts. Even so new and thriving a state as Michigan was involved in complicated financial embarrassments in the years following 1840; partly on account of this, she was almost overtaken by Wisconsin during this decade. To those suffering from such conditions Wisconsin offered strong inducements. Taking counsel from the mistakes of others, it had succeeded in organizing itself without debt, and taxes, as yet, were insignificant. It was a land of barter, where a little hard money went a long way. Rich farms could be had for a few dollars in cash. To those of a speculative turn, prospective city lots held out promises of sudden fortune, promises which were often fulfilled. It is not surprising that native emigration set in this direction.

As in earlier movements of population in this country, the new settlers came in chiefly along parallels of latitude. That New York sent the chief contingent is obvious to anyone who possesses a cursory acquaintance

with Wisconsin pioneer families. Up to 1850, she had sent six times as many as any other state and more than one-fifth of the entire population of the young commonwealth. At the same time, over eleven thousand had moved in from Ohio. Vermont who, for a century, has poured from her mountain loins a larger proportional share of her native born than any other state, sent into Wisconsin, during this decade, above ten thousand, that is, one in thirty of the entire population. From Pennsylvania came between nine and ten thousand; while something over five thousand natives of Illinois had crossed the border.[1] If we exclude the fifty-four thousand who had been born within Wisconsin itself (the great mass must have been, in 1850, under fifteen years of age and nearly half of them of foreign parentage), about 106,000, or seventy per cent. of the native born population had come from the Middle States and New England; about two-thirds of the remainder had come from the sister states of the Old Northwest, leaving between ten and twelve thousand who had been sprinkled into Wisconsin from every state in the Union.

But these were the years, too, when an increased number of Europeans turned their faces toward America. Recent improvements in ocean travel made it possible to transfer larger masses of people in a short period from continent to continent. More important still, conditions at home had put a large number of Europeans

[1] As these rough estimates are based on the nativity statistics of 1850, they do not furnish a perfect analysis of the emigrations. Families born in New York or Vermont might have spent a long period in Ohio or Illinois, yet count as having entered Wisconsin directly. On the other hand, an Irishman might have come to New York as a child, yet not appear in these estimates as a colonist from New York. The writer is cognizant of numerous individual cases of both sorts. On the whole, however, the proportions must have been about as here indicated.

in the mind to seek a newer world. During the years from 1840 to 1850, every important country of western and northern Europe was the scene of great economic distress, or of social unrest, or political reorganization, or of all. Doctors of many shades of belief, angles of interest, were counseling emigration as the speediest means of relief, whether for the oppressed individual or the harassed state. It was an era of romantic individualism and of physical indigence. The idealistic sentiment of *Wilhelm Meister,* "'Tis that men might wander in it that the world was made so wide," coalesced with prudential philosophy; minds full of romantic aspiration and stomachs empty of sustenance pricked on the unresolved toward wider frontiers and fuller granaries across the seas. The expansion of the United States during the past twenty years had demonstrated that, if still an experiment, it was one of the biggest and most engrossing that humanity had tried. Immigration was already in motion when the Mexican war and the advance into Oregon, carrying the western boundary to the Pacific, were climaxed by the gold discoveries in California,—an explosion of events which opened thrilling perspectives of American destiny.

Knowledge of America had increased enormously in a generation. American literature, now entering upon its worthiest period, was attracting somewhat more favorable attention in the Old World. Cooper's *Leatherstocking Tales,* of which the last and one of the most characteristic appeared in 1841, had attained wide popularity abroad, especially in England and Germany. They were successful in throwing over American frontier life a glamor of picturesque excitement which, however fictitious, must have had its effect upon romantic spirits. On a lower plane, the fervid prospectuses with

which transportation companies flooded Europe took no pains to discourage enterprise by exaggerating the hardships of transatlantic existence. Nor was literary exploitation of the New World confined to provincial authors and commercial guide books. The descriptions of America by English, French, and German travelers, between 1823 and 1853, form a considerable library. Around 1840, we were visited by a number of distinguished foreigners who had the gift to be widely read and who, whatever their aversion to our taste and manners, did not disguise their astonishment at our natural advantages; who, whatever they thought of our free institutions, could not deny that we had free land. De Tocqueville (1831) analyzed our institutions with a Gallic acumen which recommended his book to a world-wide circle of polite readers. Charles Sealfield, the German-American novelist, exploited the Ohio valley. Miss Martineau (1834-36), Dickens (1842), Buckingham (1842), all reached the upper Mississippi region and made vivacious reports of the crass but teeming life they saw.

Of such advertising, Wisconsin enjoyed its due share. Hundreds of reports, published and private, in various languages were circulated in Europe. Of these perhaps none attracted more readers than the account of Captain Marryat, the popular English novelist. In June, 1837, Captain Marryat made an overland trip up the Fox valley from Green Bay to Fort Winnebago (Portage), and in his *Diary*, published shortly after, dwelt with superlative pleasure upon this portion of his travels. The landscape, which delighted him beyond measure, he analyzed as composed of "alternate prairies, oak openings, and forest." The "oak openings" were the most remarkable, having all the characteristics of the lordly

parks of England; "it is, in fact," he wrote, "English park scenery." The prairies he saw as billowy meadows asking only the presence of thousands of cattle to become the most remunerative pastures in the world. He dwelt upon the healthfulness of the climate to the disadvantage of the country south and east. The preparedness of all for the occupancy of man impressed him profoundly; there seemed "little to do but take possession." "I consider the Wisconsin territory," he declared, "as the finest portion of North America, not only from its soil, but its climate."

The summer the above words were written, the last of the treaties was concluded which extinguished the Indian title in all Wisconsin lands south of the Fox and Wisconsin rivers, the line of Marryat's journey. A brief notice of the various foreign constituents which shortly joined in the development of this region will be helpful toward an appreciation of the people who composed the state at the time of its organization.

The British Isles were undergoing an economic crisis in the years following 1840. There the results of the industrial revolution, as yet but imperfectly understood, were most appalling. Efforts of government to relieve the distress were largely futile. Cabinet after cabinet grappled helplessly with the situation. Political bitterness was acute. The agrarian population was tragically destitute, above all in Ireland. Carlyle's grim pictures are well known; "the blue-faced Hibernian," "the finest peasantry in Europe," demoniacal peasantry, thronged the streets of English towns, ragged, grinning, begging, —debauching the English labor market. To crown woe for the "root-fed animal" came the potato famine of 1845. The exodus began. Crowded to capacity with

cargoes of wailing peasantry, ship after ship departed for the New World. In six years the population of the wretched little island was depleted by nearly two millions. Many died of famine and pestilence at home; many, crowded into filthy ships, did not live to see the promised land; most who arrived were too devoid of means to get beyond the seaboard and remained there as laborers about the cities or were drafted into the cruel sap-work of the railroads, whose first brilliant era of extension was now at hand. Considerable numbers, however, worked their way westward; and, by 1850, there had established themselves in Wisconsin, 21,000 Irish, most of them desperately poor.

Conditions similar to those which almost annihilated Ireland prevailed throughout the United Kingdom. An emigration of 100,000 a year began in 1840 and reached 248,000 in 1847, 368,000 in 1852. Of these a large number came to the United States. English, to the number of 19,000, found their way to Wisconsin before 1850; 3,500 Scotch and 4,300 Welsh came during the same period; thus, a total for the United Kingdom of 48,000, settled in Wisconsin at this time,—half as many as were to be found in Indiana, Illinois, and Michigan combined. They constituted nearly one-half the foreign born population, about one in five of the whole acquired population of the state.

Of the eight thousand who entered from Canada a large proportion must have been, likewise, of British extraction. Nevertheless, a considerable number of Canadian French had preceded the main migration. Probably the most noteworthy of these was Solomon Juneau, founder of Milwaukee, who had established a trading post on the site of that city as early as 1818. Of those actually born in France the state had less than

a thousand, though France, too, was in turmoil during these years.

Popular discontent in Germany, which found expression in the political agitations from 1830 to 1848, had started an era of German emigration to this country. A few choice spirits to whom exile was the dear price of liberty, victims of government persecution of the Student Societies, came in the van of this movement. Such were Francis Lieber, the able juridical writer, at one time professor at Columbia, and Carl Follen, first professor of German at Harvard. Many early arrivals took up lands in the Ohio valley and became the famous "Latin farmers" of that region. A later contingent pushed down the river into Missouri. But the German movement reached its full head precisely in the Wisconsin epoch.

Desire for civil liberty was the pervading motive of German emigration. To be sure, economic forces played their part in dislodging the masses. A potato shortage throughout southern Germany in 1846-47, and again in 1852-53, failure of the vintage in Würtemberg, 1850-53, came to aggravate hardships already sufficiently severe on account of overpopulation, the destruction of hand industries through the substitution of machinery, and the difficulty of securing lands for agricultural purposes. German arrivals in this country jumped from 47,000 in 1846 to 74,000 in 1847. After the failure of the revolution of 1848, they took another leap and by 1853 had reached 215,000 a year. As has been said, ideal sentiments were an important factor in this movement. The *Grundrechte* for which the patriots of 1848 bled in vain might have been echoes of the Wisconsin constitution adopted the same year. The shipwreck of this attempt to secure popular rights not only sent the leaders flying

for their lives, but made it possible to mobilize the disappointed masses for the invasion of a new Canaan. The dream of an exclusively German state in the New World came to naught; but two efforts in this direction had brought Wisconsin into prominence as early as 1835-36. Its soil, its climate, and its rich forestation found favor in German eyes, not only as excellent in themselves, but, so many averred, because they recalled the features of the Fatherland. To the usual liberties guaranteed by our state constitutions Wisconsin added, moreover, the most hospitable alien clause as yet ratified by any state. It had no debt and it had cheap lands in profusion. It attracted far more than its proportional share of this new element so adroitly compounded of the aspirations and the economies which make for the progress and solidity of popular states. The total German population of Illinois, Indiana, Michigan, and Iowa had reached in 1850, about 83,000; that of Wisconsin alone was nearly half this number; something over 40,000, or one in six of its acquired population were German born. Milwaukee, destined to be *die deutschese Stadt,* soon became the greatest distributing point for Germans in the Northwest. The spring of 1839 has been set as the time when German immigrants began to arrive there in considerable numbers. The majority of the early arrivals were small farmers, artisans, or rustic laborers, a class of settlers sorely needed in a land where everything remained to be done. There were, however, a few men of education among them. Dr. Huebschmann, who reached Milwaukee in 1842, was a Jena man, and at once became prominent in the young state. More of this class came after 1848. Carl Schurz, the most distinguished of the "forty-eighters," came in 1852. The same year brought Edward Salomon, a product of the

University of Berlin, who was afterward prominent in the government of the state and conspicuously useful to the university.

As the colonizing movement proceeded the German land-seekers usually came in bands of fifty or one hundred families under the guidance of some leader or leaders, picked out their farms and village sites in the heavily wooded regions along the lake to the north of Milwaukee, pushed into the forests with ox and cart, opening their way with the ax as they went, and settled down in solid little communities, each with its own church and its local brewery. Many of the first generation died with their wooden shoes on, acquiring the industrial habits of their adopted country but not its speech or habits of mind. The influence of the Germans upon the social life of the state was to be profound.

Coincident with the opening of Wisconsin was still another immigration movement, that from Norway. In 1825, a party of fifty-two Norwegians, proselytes of some English Quakers at Stavanger, had settled in Orleans County, New York. Because of their daring voyage in a sailing vessel which seems to have been startlingly diminutive even for these days, they are known to history as "the Sloopers." Ten years later, an offshoot of this community, having been preceded by a scouting party of six men, established a colony in Illinois. The lure of the West at this time is well explained by the fact that one of their number was able to exchange one hundred acres of unprofitable land in New York for a full section of the Fox River prairie. The following year, one of the Fox River group revisited Norway, married, and succeeded in inducing a shipload of families to accompany him on the return voyage. This

incident is thoroughly exemplificatory of Norwegian emigration to America and marks its beginning as a movement. The venture of "the Sloopers" had been a sporadic exploit partly incited by religious zeal. That of 1836 was an organized effort and was so successful that an overflow ship had to be secured and actually preceded the returned native and his bridal party to America. Hereafter, each year brought increase of sailings and each sailing increased the eagerness of those left behind to know more of the land to the west. At first, information was scant. One, who became an emigrant leader, had his imagination lighted up by a German book, entitled *Reisen in Amerika,* "found in a friend's library in Bergen," winter of 1836-37. Another's interest was aroused by reading of our "excellent laws" in a German newspaper. Each return from America was a signal for letters and visits from far and wide. In 1838, as the result of such besiegings, America became the subject of two pamphlets by returned emigrants, and, in 1842-43, of a considerable book. These printed documents, amusingly enough, carried more weight in some quarters than the letters and personal accounts of friends. After a few years, however, the letters home began to contain the liveliest of all arguments,—remittances and prepaid tickets. It has been estimated that fully fifty per cent. of the Norwegian immigrants of a later period arrived in America through such means.

It was in the spring of 1839 that a party of Norwegians, sailing from Skien to New York and thence passing by the Erie Canal and the Great Lakes, landed in Milwaukee, bound for the Illinois settlement. A sort of myth exists in Norwegian-American lore to the effect that a citizen of the bustling frontier village di-

verted them from their destination by pointing out two men, a fat and an ague-shaken lean, as typical effects, respectively, of residence in Wisconsin and Illinois. The Fox River settlement had been constantly ravaged, as a matter of fact, by malarial fever, the chief terror of the wilderness to newcomers. Each of the party, for the sum of fifty dollars, became master of forty acres of land at Muskego Lake, about fourteen miles inland from Milwaukee, and here was established the first Norwegian settlement in Wisconsin. The same summer, a number of the Illinois families became discontented with their malarial surroundings and moved up the Rock River valley into Wisconsin. The same year, also, a party pushed farther up Rock River and located claims in the beautifully wooded Koshkonong region of Dane. The settlement founded here the following spring (1840) became for a time "the destination of four-fifths of those who emigrated from Norway." By 1850 about nine thousand, one-half the total Norwegian population of America, had taken up their residence in Wisconsin. A Norwegian pastorate had gone into operation at Koshkonong in 1844, a Norwegian newspaper at Muskego in 1847, and the movement was well started which was to make the Norwegians an element to be reckoned with in the social history of Wisconsin.

Opinions have differed as to the importance to be assigned to various motives in the promotion of Norwegian emigration. The latest and most critical writer [1] on the subject furnishes good reasons for supposing the incentives to have been almost exclusively economic. America was to the Norse emigrant, first of all, a land of material advantages and, after that, of social opportunity. Whether peasants with meager returns for their

[1] Flom, G. T., *Norwegian Immigration to the United States.*

labor or younger sons without prospect of estate, they were those who saw no promise of securing a foothold in the old home which satisfied their material ambitions and their desire for social importance. Notions of a loftier spiritual independence in a fresher world no doubt weighed with some. Herein they did not essentially differ from the average of our native-born pioneers. Since most of them had but scant means their directest way to property was to become possessors of land. As a result, the immigrants of this epoch were added almost *en masse* to the agricultural population.

The movement toward Wisconsin had not yet spent its force, and the material development of the state was barely indicated, at the point where we have been taking stock of its constituents. As we have already seen, the annual growth in population from 1850 to 1855 was to be in actual numbers, though not in ratio, greater than in any preceding period. It was exceeded by that from 1855 to 1860. Wisconsin had been "put on the map" at just the proper time to give it an unprecedented suddenness of development and stock it with a diversity of population hitherto unparalleled even in America. The preliminary exploitation was carried on, for the most part, by native settlers, many of them waiting at the gate when the lands were thrown open. A few foreigners straggled in during the late thirties. Then the rush of the native-born in the forties was augmented by a gradually increasing stream of foreigners which became a flood in 1846 and reached high-water mark in the late fifties. After its organization, the state made unrelaxing efforts to procure settlers. It appointed immigration agents who advertised throughout the East and in English and German newspapers, and even met incoming vessels at the seaboard, land charts in hand. Its officials,

with dubious probity, threw away the school and university grants at low prices, ostensibly that settlement might suffer no check for want of bargains in land. Inventions of machinery in this decade stimulated agriculture and made its pursuit more attractive. An invasion of the northern pine-lands poured a million and a quarter a year into the arteries of the state, a mere earnest of what was to come. Railroads tapped the interior, giving easier access to settlers and promising an easy exchange of their raw products for the commodities of civilization. The Wisconsin pioneer, meantime, served his brief but exacting peonage to the frontier.

It would be satisfying, at this point, to draw together the congeries of peoples, motives, and material conditions which we have hastily sketched, into some synthesis which should account for and characterize the civilization they were to produce. So ambitious a design could scarcely hope for success; at the same time, a few principles of unity and certain lineaments of character are fairly easy to discern. It will not be exacted that such a notice shall differentiate Wisconsin exclusively from other commonwealths founded under similar circumstances. Rather, the fact that numerous features of the young western state were accentuated in Wisconsin is what recommends it for this treatment. Its character was less unique than strikingly illustrative of American state building at this epoch. The fact, also, that the constituents of its population remained in about the same ratio for considerable time afterward, makes this a not unfavorable stage for analysis.

Wisconsin was seized and developed by a breed of hardy, industrious, and ambitious people drawn from northeastern America and northwestern Europe.

Various in immediate origin and superficial customs, they were all sired under northern skies and had many moral traits in common. One of these was energy of purpose. Of the five hundred and fifty odd thousands of people in Wisconsin in 1855, five hundred thousand were there by individual choice or family agreement, and not by chance of birth. The nature of the choice was significant, and the more so, that choice was abundant and varied in America at that moment. This was the choice of men willing to try a hazard of new fortunes, but not to stake all on a spade of dirt. The Wisconsin wilderness met its tamers with hardship, not with danger. The fortitude which outwears the one rather than the daring which laughs at the other was the temper of their courage. The hopes which lured them were of similar quality. Wisconsin was not an Eldorado; it was a land of promise, where he who had given hostages to fortune might expect, by diligence and hardihood, to rear a home and accumulate a competence. The spendthrift and the adventurer were not absent, of course; but, in the average of things, he whose dreams were of dazzling riches or who craved excitement found more inviting fields in the farther West. Wisconsin selected her people from the prudent and the bold.

Such qualities were confirmed by their life, which was physical and fiercely occupied with material interests. They had need of physical lustiness and concentration who, in these few years, took possession of a wilderness and made it a land of homes. Most of them were young or in the prime of life and prodigal of their force. The members of the first constitutional convention averaged thirty-seven years of age; considerably over half were farmers and three-fourths were men that worked with

their hands. As one peruses the lives of individual pioneers which abound in the local histories, he is struck with the frequent mention of their unusual gifts of bodily strength and their feats of endurance. Yet even in the manual tasks of life their qualities were not merely physical; to hardiness and resolution, the pioneer must add skill and resourcefulness. His measure of success and of comfort depended on his being, like the later general farmer, but in a greater degree, a jack-at-all-trades. Handy with ax and saw, at the forge, with rod and gun; patient behind the plow and the long line of oxen; capable of swinging a cradle all day through the sagging wheat, or wielding a flail deep into the winter night; breakers of horses and oxen, farriers, tinkers, butchers of hogs and sheep, breakers and layers of stone, uprooters of trees, builders of roads and houses; learned in the whole basic lore of material existence, powerful and versatile and indefatigable—there was no limit to the variety or the extent of their tasks. The women were equally hardy, capable, and devoted. Bearers, each, of five to seven children, they were their own servants, minded their own poultry, set and skimmed their milk, churned, worked their butter, followed the butchering with prodigious epochs of sausage, souse, head-cheese, lard, and soft-soap; must tend the garden if there was to be one; clothed their children; cooked, washed, scoured; mended and darned the whole family, and, if sufficiently forehanded, got everybody to church, if there was one, on Sunday. Among the foreign born peasants, all these tasks were reduced to a minimum, and the women joined the men in the fields. It is to be remembered, finally, that these were not the down-trodden poor, but the ladies of the land, who wrought shoulder to shoulder with their mates and, in

due time, came with them into an equal heritage of comfort, respectability, and education.

For, from the moment of its real development, it was a mixed society in which men and women bore equally the burdens of life. In the early territorial days and down to about 1840, a large share of the settlers had been males. After that, most of them came with full impedimenta; or, they came alone, cruised about the woods until they found, beside some spring or in some oak clearing, the spot they wanted, crashed their axes into the forest monarchs for a few sweatful days, hastily squared up a cabin, and went back for their families. By 1850, there were nearly as many women as men in the state. In the average hundred of the native born settlers only four males would have been unpaired by a female; while among the foreign born, the overrun of males would have amounted to eight. During the next twenty years, four hundred thousand children were born in the state. So quickly had Wisconsin assumed this aspect of settled society.

It was, then, a society of independents and of producers, where to be idle was to be intolerable and almost to be incredible. For not only did everyone work, but almost everyone worked with his hands and almost everyone worked for himself. In 1850, against 40,000 general farmers, there were but 11,000 unattached laborers and about 6,000 artisans, as carpenters, coopers, smiths. There were 3,000 miners and 1,500 employed in lumbering. Against all these and their families there were but 1,200 merchants, who did not average a clerk apiece, and there were only two banks in the entire state. There was a provision of one tailor to beautify each 414 of the population, and for every thousand people, there were not quite two doctors, a lawyer and a half, a clergyman

and a third, and two-thirds of a male teacher. Most of the teachers, of course, were women. There were six daily newspapers, four that appeared twice or thrice a week, thirty-five weeklies, and one monthly. Of these, one was printed in the Norwegian, and two in the German language. There were seventy-two public libraries containing a total of 21,020 volumes, or one-fifteenth of a book for each inhabitant. At the same time the number of those who could not read at all was relatively small. The percentage of illiterates over twenty years of age was rather less than that of Michigan and considerably less than that of Iowa, and the conditions of their distribution between foreign and native born were reversed as compared with those two states. Of Michigan's illiterates, five-eighths, and of Iowa's seven-eighths were native born; over two-thirds of Wisconsin's illiterates were foreigners,—a difference not counterbalanced by the greater number of foreigners in Wisconsin. Measured by this thermometer of intelligence Wisconsin's population was superior to that of either of her neighbors.

We have before us the picture of a busy, successful, domestically and materially minded people. The instinct which they developed toward the social scheme was that which might be expected from the process of their selection and from their habit of life. They were of the class who possess a cool-blooded detachment from the established order of things, neither blindly loyal nor frantically hostile to it. Clear-eyed toward substantial realities, skeptical of tradition and scornful of superstition, loving independence, self-confident, eupeptic, unsensitive in a whole group of perceptions and sentiments, it must have been that the tentacles of organized society found less to take hold of in them than in their fellows who stayed at home. To their minds, looking forward and

not back, the superior social, intellectual, and artistic surroundings, the associations and habitudes, and every relaxing tenderness of the old home, were well exchanged for a life of struggle, gain, and independence in a new place. We do not forget, indeed, that, in many cases, emigration was a flight from actual want; we speak of averages. The sobriety of their aims, however, is sufficient indication that they were derived from the liberal, not from the lawless elements of the older societies. Here and there, as some precipitancy of material development flashed dizzying glimpses of fortune, the rapacities were unleashed and there were stampedes of dishonesty and corruption in private business and the public service. But the thriftiness of the general ambition always reinforced the common conscience to curb license and reestablish integrity, in public affairs at least.

Although their chief object was to mend their fortunes, the Wisconsin settlers came in the firm expectation of political justice and social equality. Intensity of public spirit varied, as we have seen, among the different groups. It varied greatly among individuals; but there can have been few, native or foreign, without some echo in their spirits of the emancipations with which the world was ringing. Our native settlers had little reason to feel passion or mistrust on the score of political liberty. These had been forestalled by an instrument two years older than the national constitution itself. "Our national guarantee of personal freedom, universal education, and religious liberty, found their first expression in the great act which provided for the Government of the Northwest."[1] There had been a recent reconstitutioning among states from which Wisconsin drew largely, and the framers of her government, with no lack of

[1] W. F. Allen, *Place of the Northwest in History.*

models, took care that it should have the latest improvements. The foreign element arrived too late to take much hand in the organization of the state; but those who were on the ground, mostly Irishmen and Germans, worked hard for the clause conferring immediate political rights on aliens. Against the prejudice of that Know-nothing period abstract justice could not have prevailed had it not been reinforced by a motive of expediency, that of hastening the material development of the state.

But economic conditions produced a far more important effect upon the status of the foreign groups in Wisconsin than was involved in the permission to vote within a year. The foreign settlers entered at once upon a material equality which was destined to bring all others in its train. Democracy may be a paradox, or it may be a truth; an institutional figment or a fact. In the Wisconsin of this period economic conditions made it a fact. Where all were established side by side upon the land, with the prosperity of each dependent upon his own diligence and cunning, lines of nationality were soon blurred and, in some cases, were virtually erased in a generation. The situation of the foreign settlers of Wisconsin was as different as possible from that of the later accretions in the East and Far West, or in Wisconsin itself to a less degree. When divisions of nationality fall in with economic stratifications, slips and chasms are produced in the social structure which jeer at democracy. In Wisconsin, at first the polaric tendency among social groups based on differences of language, customs, and religion, was accentuated by their practice of establishing themselves geographically as units. Some of the groups maintained their identity fairly intact for a generation; but under stress of pioneer conditions such differences attached them the more securely to their common politi-

cal organization as the bulwark of their mutual fortunes, and tended to magnify the functions of the state. They were, indeed, quite conscious that political equality was only the means by which they were to secure for themselves the blessings of an orderly and progressive civilization. The ringing message which Governor Nelson Dewey presented to the first legislature is remarkably clear on this point.

"Our people, impelled by the spirit of adventure and enterprise in our own country or driven by the hand of oppression from foreign lands, have cast themselves upon the soil of Wisconsin as their adopted home, to secure that social and political equality so necessary to true happiness and prosperity. Possessing common interests and having common objects to accomplish, may the onward course of our people to the goal of their aspirations be unobstructed, and nothing occur to interrupt their united and harmonious action. . . . Equality is the basis of our free institutions, and the true policy is, so far as possible, by proper and judicious legislation, to produce that equality, as well social and intellectual, as political."[1]

This message has something of the virtue of prophecy. In Wisconsin, happily, with all its diversity of peoples, the influences here invoked were destined to work with unusual effectiveness. It became a theater for the evolution of that "progressive democracy" upon which it has been so frequently congratulated and upon which, with something of the breeziness of its founders perhaps, it so freely congratulates itself. But, bragging aside, its early conditions were such as to encourage these doctrines. With economic equality and relative unity of economic interest, the social cleavage gradually disap-

[1] *Senate Journal*, 1848, App. 2, pp. 10 and 12.

pears; the groups touch, knit, and move as one toward the universal welfare, forward.

"Forward"; this was the word chosen for the scroll of honor upon the great seal of the state. The word had a timely virtue. World-wide, the *Zeitgeist* lent it force. The last words of Goethe's *Faust,* the philosophies and revolutions of France, of Europe for that matter, the mechanical triumphs of the age, the trend of biological science toward evolutionary hypotheses soon to be formulated in the works of Darwin, such recent English phrasings as the last great speech in Browning's *Paracelsus,* "progress is the law of life, man is not Man as yet . . .," and the culminating passage, declaimed by every schoolboy, of Tennyson's *Locksley Hall,* "Forward, forward let us range, Let the great world spin forever down the ringing grooves of change,"—all combined to give to that idea of progress which had been growing on the world since French Revolution days a currency and a breadth and novelty of expression that made of it virtually a new conception, a sudden, thrilling world-discovery.

The sense of flux was nowhere so phenomenal, in both senses of the word, as here in America, and most of all on the frontier. States filling up in a decade with the world's restless peoples, a wilderness parceled into farms, logs giving way to boards, wood to steel, the crawling ox-train to the rushing locomotive, and cities rising like an exhalation, feelingly persuaded that civilization is a protean thing and imposed the mental habit of expecting tomorrow to be more than today. The procession of material successes, the confident expectation of great things, the widespread faith in the efficacy of political action to take care of all the concerns of life, promoted that highly stimulated utterance which has

come to be known as "American brag." At the same time, one marks in the habitual speech of pioneer days the pomp and sweep of something more than self-congratulation, a constructive zest worthy of the builders of a state. In the records of the Old Settlers' Reunions at a later time, as in the broad-blown effusions of early politicians and educators, one detects, at the back of the wind, a remarkable feeling of *esprit de corps*, the sense of unity in a vast design.

This stir of material progress and the magnitude of scale in all its operations begot a social tone in the West, and the equal mingling of people of many nations and denominations and of both sexes begot a catholicity of views and sentiments which were to produce a new school of manners. There came to be a liberality, a frankness, and a magnanimity in all the social contacts of life unlike that which any single element had known in earlier surroundings. What the West called doing things "in a large way" had its effect upon the very operations of the mind. There used to be a rustic pleasantry very freely circulated in regard to a certain sect which had preserved most of the characteristics of its contracted sectarian life upon the "one-horse" perpendicular farms in an eastern state. The gentiles were wont to say of them that they were "so narrow minded, six of them could sit side by side on the same buggy seat." Such a spirit barely survived a generation on the broad farms, in the mixed societies, and under the secularizing influences of the western up and onward spirit. Irish and German Catholics, German and Norwegian Lutherans, English and German Methodists, English and American Episcopalians, New York and New England sects of every creed and practice, sometimes compelled to join in one congregation, while they had their spiteful jars, were never-

theless, liberalized together in the free air of the frontier. The Germans with their love of music, their singing societies, their Sunday festivals, their beer and *Gemüthlichkeit*, overwhelmed in a generation much of the narrow sectarian prejudice of New England Puritans and Scotch Presbyterians, the grim holidays taken, as Lowell said, "like a redoubt," the sour Sundays, and the generally joyless creed of life.

I know it has been said that this enthusiasm for impressive material spectacles and this freedom from social restraints and conventionalities must tend to create an external conception of progress and a vulgar test of social values, and such was, to a certain degree, the result. The inclination of the frontier has been, without doubt more than elsewhere, to rank expansiveness higher than intensity; to admire force and pace at the expense of refinement and poise; to let voracity blunt discrimination; to respond to growth in size, be apathetic to improvement in essence; to make a god of acceleration. The driving, thriving spirit which pervaded the advance regiments of civilization could not but produce a character more eager than profound, more fertile in expedients than distinguished in reflection, too impatient for results to be critical of means, and wiser in the use of its energy than of its leisure. On the other hand, the world has never seen so much energy, so alert an intelligence, and so broad and sane a purpose brought to the conquest of nature,—nor a vanguard that recovered with greater alacrity from the first shocks of primeval contact.

It may be justly urged that many of the foregoing traits are rather national than specific in their application. And indeed, it is true that Wisconsin at the moment of its organization is more significant for typical

than for unique characteristics. Probably its early life was too swift and miscellaneous to be intensely originative; but it was immensely acquisitive. At first glance, there is little to distinguish it from half a dozen western commonwealths that took shape under much the same conditions. And yet, though scarcely a line in its portrait is wanting from the likeness of some sister state, there is an emphasis of shading which brings out its features in so pronounced a way as to make it almost the idealization of mid-century, mid-continent state building. This is perhaps equivalent to saying that it is medially and typically American. In its balance of material interests, in the timing and swiftness of its early development and its accumulation of peoples, in the domestic sobriety and energic resolution with which it addressed itself to material tasks, in its actual democracy, its faith in progress, its very limitations of character and culture, and finally, in those relations between the state and universal education which lie ahead of us, it deserves to be rated, not indeed as the greatest, but surely as one of the most representative of American commonwealths.

II

ANNIVERSARIES AND ORIGINS

A BILL to establish a university at the "City of the Four Lakes," was introduced into the Wisconsin territorial legislature, December 27, 1837. This was amended in the Council, or upper house, so as to read "there shall be established at or near Madison, the seat of government, a University for the purpose of educating youth, the name whereof shall be 'the University of the Territory of Wisconsin.'" In this form the act repassed the House and was approved by Governor Henry Dodge on January 19, 1838. A congressional grant of two townships of land from that part of the public domain lying within the limits of the territory, which it was stipulated should be "for the use and support of a University," "and for no other purpose whatsoever," passed under the hand of President Van Buren on the twelfth of June, the same year. Except for the selection of its lands, which began in 1840, was completed in the territorial period, and was well made, the university then paused for ten years. The enabling act of 1846 confirmed the university grant and a clause of the state constitution, approved by the people in March, 1848, provided "for the establishment of a state university at or near the seat of state government, and for connecting with the same from time to time such colleges in different parts of the state as the interests of education" might require. This provision was carried as a part of the statehood bill which received its final sanction from

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From the painting by Christian Abrahamson

the pen of President Polk, May 29, 1848. In his inaugural message delivered June 8, Governor Nelson Dewey referred "to the wisdom of the legislature the question of the expediency" of arranging at once for the sale of the university lands. An act incorporating the university and vesting its government in a board of regents received his approval July 26, 1848. The same legislature that created the university provided for the appraisal of its lands, and the next year (1849) for their sale and for the management of the university fund. The board of regents held its first meeting October 7, 1848. At this time were elected the first professor, John W. Sterling, who served the university for thirty-five years, and the first chancellor, John H. Lathrop, who served ten years. The purchase of a campus site was authorized January 16, 1849.

On February 5, 1849,[1] in a room temporarily provided for the purpose by the citizens of Madison, Professor Sterling enrolled a preparatory class of seventeen members which soon increased to twenty,—the first "university students." The chancellor notified the board of his acceptance in March, arriving the following October,

[1] In regard to this date there has been some confusion. The date given above is amply supported by notices in contemporary newspapers as well as by the manuscript records of the board of regents. The statements in Thwaites' *University of Wisconsin* (1), p. 58, that the mention of the presence of students at the inauguration of Chancellor Lathrop (Jan. 16, 1850) "was a stretch of reportorial fancy" with what follows, and (2), the legend "occupied by the State University, 1850-51," sub-pended to the view of the Madison Female College, p 53 (so far as it implies that the building was not so occupied earlier), are erroneous. The same error appears in the *Preface*. The statement in the same place that the Milwaukee *Sentinel* "had no correspondent on the grounds" is equally incorrect. Gen Rufus King, editor of the *Sentinel*, was present in person, being a member of the board of regents Brief notices of the inauguration appeared in the issues of January 17 and January 18, and a full account, evidently from the pen of General King, appeared January 19.

formally assumed the chairmanship of the board of regents November 21, and was inaugurated with full ceremonies on the morning of January 16, 1850.

A detailed plan for grounds and buildings was adopted on the afternoon of Chancellor Lathrop's inauguration. North Hall, known at first as North Middle, a little later, as North College, and still later as "the North Dormitory," was opened to students September 17, 1851, and was officially accepted by the building committee on the eleventh day of October, following. The first college class, consisting of three members was formed in the autumn of 1850. On July 26, 1854, the first baccalaureates were conferred upon Levi Booth of Madison and Charles T. Wakeley of Whitewater, members both of Professor Sterling's first class.

Upon Levi Booth, alphabetical priority over his classmate has conferred the distinction of being remembered as the first graduate of the university. In the same sense, he was its first student; for his name heads Professor Sterling's earliest roll. This venerable alumnus died six years ago. Shortly after graduation he had moved onward to the farther west. His death, at the age of eighty-three, occurred in Denver, Colorado, December 27, 1912. It fell on the seventy-fifth anniversary of the introduction of the first university act in the territorial legislature. Thus the complete university cycle lies almost within the span of life of its first alumnus.

This brief chronology of the first steps of the University of Wisconsin paves the way for a clear indication of its position in state university annals. The incidents which have attended the development of higher education under state patronage in Wisconsin are illustrative of what has gone on in a score of American states during these seventy-five years. While there is not wanting the

picturesqueness of individual adventure, the story of the university's struggles and ultimate victory will contain, for many, the more pregnant interest which attaches to a type. Its geographic and historical position have been such as to give it considerable consequence from this point of view. Even if this were not so, it would be desirable to view the history of the university, to a certain extent, with reference to events elsewhere. Not to recognize these wider relations is to understand events imperfectly and frequently to be betrayed into injustice. It will be advantageous then, to review, as summarily as the subject will allow, the origin and nature of the state university idea.

The history of the state universities is usually held to begin with the *Ordinance of 1787*. This celebrated covenant was a formulation of the principles which were to regulate relations between the Northwest Territory and the original federation of states. It took form on the occasion of a sale of lands by the national government to a group of prospective colonists known as the Ohio Company. Ratified by the first Congress under the constitution, the *Ordinance* came to be recognized as the palladium of civil rights for all the territory "north of the Ohio River." Among its assurances was that contained in the oft-quoted clause respecting education: *"Religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged."*

There is no explicit reference to higher education in the clause; but in the negotiations between Congress and the leaders of the Ohio Company it was agreed, not only that the sixteenth section in every township of the prospective state should be donated for the support of schools (all that Congress, at first, was disposed to allow), but

that two full townships of the public domain should be set aside for the endowment of seminaries of learning. The succinct statement of the relations between education and government included in the *Ordinance* and the interpretation of this statement in terms of public land were stipulations of the representatives of the Ohio Company. Furthermore, this disposition of portions of the domain which Congress held in trust for the nation was justified by Congress itself on the ground that it would increase the value of the remainder by rendering it more attractive to colonists. Therefore, the first federal grant of land for the encouragement of higher education in the Northwest Territory is to be regarded as a concession to demands of the settlers themselves. When, during Jefferson's first administration, Ohio was admitted to statehood, its educational grants were confirmed and the lands were transferred to the state. Thereafter, the policy was continued toward each successive unit of the Northwest upon its organization as a territory, and, before the organization of the Northwest was completed, the precedent had been extended to the regions beyond the Mississippi. In brief, the dedication of a fixed portion of the public domain to the encouragement of higher education became one of the stereotyped inducements offered by the nation to settlers upon its unoccupied lands.

Almost by accident the national government had entered upon a course of action which, grafted upon other conditions of the frontier, was to yield a unique institution,—the American State University. The idea of a state university as we now comprehend it, includes characteristics which may be fairly systematized under three heads: centrality, universality, secularity. By the term centrality it is meant that all the state's activities in superior education shall be administered under one

organization in immediate relation, as to support and responsibility, with the state government and as far as possible at one place. This need not be taken to preclude privately supported auxiliaries to higher education; but it should preclude any weakening of the state's functions through such agencies. The second term embraces two conceptions: first, that the state institution shall provide the highest available instruction in all departments of knowledge, both fundamental and applied, with the pressure upon the confines of knowledge which such instruction implies; second, that it shall serve as widely as possible the entire scientific interest of the state, opening its advantages to all who are prepared to profit by them. The term secularity has to do with the tone of the university's intellectual life. It may be taken to apply, not only to the absence of sectarian bias in religious teaching as it was understood by the older generation, but also to the absence of that brahminism in education which formerly limited its functions to the training of a select body of dogmatic leaders grounded in a peculiar discipline or culture,—linguistic, philosophical, or the like. This Minerva did not spring full-armed from the brain of any single Jove.

The doctrine implied in the *Ordinance of 1787*, that education is a function of state because "necessary to good government" is now so familiar as to seem hackneyed. It was in harmony with the opinions of the most enlightened leaders of the constitutional period. That it applied to the common schools, whose advantages were available to every citizen, was easily conceded. To gain wide assent to the same doctrine in the other ranges of education was not so simple, and to awaken interest and persuade to action was hard indeed. So, though a firm logic underlies this conception of a university's place in

a democracy, it was not soon realized in institutions. Superstitions long dominant had to be scattered. Forces long scattered through the separation of church and state and the growth of sects had to be assembled under a new democratic ideal. This was not accomplished by a single political action nor yet in a single generation. Experiment and failure preceded success; the logic of events reinforced abstract theory. Emerging in the era of political clarification following the war for independence, the idea was thrown for its life among the harsh conditions of the frontier. There alone did it find a relatively clear field for its development, though the obstacles it encountered were formidable. It was not until after the Civil War that the state universities, as a class, enjoyed any considerable prosperity. The year 1867, a glance at the chronologies will show, was the *annus mirabilis* in their history; while the lustrum 1865-70 was packed with momentous origins. Conceived in the dawn of national consciousness following the Revolution, the universities gathered their first strength in the period of reorganization which succeeded our other great national convulsion.

There was at first no well-defined idea of a strong central institution for the state. Government aid to institutions of learning, whether by direct appropriation, special taxes, or grants of land, was not a novelty; such aid had been given sporadically since colonial days. However, these instances had failed to develop into systematic support and had not involved centralization or permanent responsibility of the institutions toward the state. It is true, Jefferson's plans for a university, submitted to the Virginia legislature as early as 1817, anticipated the main features of the modern state institution. The University of Virginia, organized shortly after, fur-

nished a clear-cut example of annual state aid, on a small scale, and of a central institution responsible to the state. But Virginia was founded at least partly by private subscription and Jefferson's outline remained in large measure unactualized. Virginia was relatively remote and was in actuality a rather feeble prototype. Its influence can hardly have been very potent except in Kentucky, and there the university idea, though it persisted for a time, failed to make permanent head against the obstacles which everywhere barred its progress. Illustrious from the standpoint of the Northwest was the example of New York, where a generous "literary fund" was being used for the encouragement of a variety of institutions both higher and secondary, all of which had been established by private initiative. Much the same was true of Massachusetts and, in fact, of New England generally. To the western settlers, higher and secondary education naturally first presented themselves in the form of the familiar academy and college with their trustee management, classical curriculum, substantial fees, sex segregation, and dormitory residence,—institutions eligible for unmethodical state aid, but founded by private donations and swayed by denominational interests. In every point this system was antithetic to the university plan. Yet whatever pre-conception the leaders might entertain, only those of firm originality could free themselves from the obsession of the working models with which they were familiar. Nor would it be remarkable if the mass of the people, to whom the interests of higher education were at best of remote concern, should be content to leave them where they were accustomed to see them, in private hands. Needless to say, in a new country, where all the world was young and there were no accumulated fortunes, such

support, on an adequate scale, would have arrived but slowly.

The land grants were of great moment, inasmuch as they placed in trust with each state a fund for higher education which brought it under official cognizance. All of the earlier grants were more or less mismanaged and some of them virtually squandered, facts whose financial significance is frequently distorted. With the best of management the income from the grants would not have been sufficient to support the universities on their present scale. Actually, the land grant funds provide, in most cases, an insignificant fraction of the university income. Their significance lies in the consideration that they threw a responsibility upon the state which, under proper conditions, developed first into state control and then into state support of higher education. Handling the university purse, and perhaps the more when handling it badly, the state became involved in the care and maintenance of its ward until it came in time to regard this ward as a child of its own. A striking indication of this process is to be found in the readiness with which the legislatures lost sight of the trust character of the funds and took to administering them as if they were the property of the state. In Wisconsin, years before the state had contributed a penny to the support of the institution, there was a widespread impression to which even legislators were not superior, that the university existed as a charge upon the state. From fancied to actual support was a short step. The sufficiency of the land grants was quite generally overestimated. Legislatures that would have shied at an educational proposal which involved taxation were in haste to seize the use of a fund which cost their constituents nothing. Thus was secured an early start for the state institu-

tions. Had the lands been disposed of, however, and the funds invested as advantageously, even, as was consistent with instant returns, a condition approximated by the University of Michigan, the early history of the state institutions would have been far more illustrious. For none of the land grant institutions, not even Michigan, received any financial aid direct from the state until after the civil war.[1] Without the stimulus of the land grants it is improbable that the present close relations between the states and their universities would ever have come about.

A concomitant effect of the landed endowment of the universities was to precipitate them at once into the hottest section of pioneer politics, that concerned with the disposal of public lands. In all the pioneer commonwealths, land was at first the chief form of booty, and under the unformed political conditions of the frontier all the rapacities converged upon it. However deplorable the results may have been in many particulars, at least the universities were shielded against the maximum disaster, which was to be forgotten. Had the universities enjoyed funds of such magnitude and so managed as to render them independent of, and thus perhaps indifferent to, popular favor, their character must of necessity have been much modified. They did not; but the university which could work out a fate inextricable from that of the body politic as a whole, was likely to emerge the stronger in the intimacy of its relations with the state. This, as we shall see, was peculiarly the case in Wisconsin.

It has been customary to deplore the precipitance with

[1] The slight exceptions to this broad statement to be noted here are some small appropriations by the Iowa legislature for buildings and repairs in 1858 and in 1860 and 1864, and appropriations in Michigan and Iowa for agricultural colleges.

which educational lands were disposed of, because it involved a sacrifice of the much larger sums which might have accrued had the lands been held for a rise in value. Yet it is a question whether haste (regardless of its motive) was not vital to the supremacy of the state institutions over those of sectarian affiliations. Where the latter became strongly entrenched the progress of the state institutions was far more perplexed. The circuit rider preceded the educator; direct appeals to the emotions, to conscience, and to denominational zeal, loosened purse strings that would have refused to unknot at the invitation of literature and science. The missionary spirit conveyed into the wilderness, from the older centers of population and wealth, sums of money laden with the blessings of culture and encumbered with outworn superstitions. Sectarian foundations more or less feeble, and invariably *en arrière,* everywhere preoccupied the ground. All of the land grant institutions had to reckon with their rivalry and frequently with active opposition,—an opposition likely to be reinforced by sectional jealousies. This danger came to be foreseen, and sectarian capture of the universities was provided against in most of the state constitutions and in legislative enactment. But, in proportion as the universities escaped religious entanglements, they invited the reproach of irreligion.[1] Generations of prejudice favored

[1] As late as the seventies and eighties, when the truly religious but emancipated intellect of John Bascom presided over university thought, the old feeling held its ground in Wisconsin. Neighborhood parsons shocked the souls of parents with sincere comparisons between the university and the nether regions of their venerable cosmogony. As well "send their children to hell" as to a godless college, crammed with heresy and science, and doubtless steeped to the ears in all the iniquities of Satan. Cornell suffered from similar attacks, and it is probable that every secular university was injured by such agitations. It was a part of the wider spiritual conflict which was waging during the third quarter of the century.

sectarian alliances for higher education. Only unusual tolerance of spirit and other favorable conditions would confer a victory upon the new conception. Nor is it surprising that the sectarian colleges looked uneasily and even covetously upon the "magnificent endowments" of the state institutions. To the friends of university education, they seemed to thicken the cloud of vultures which overhung the university funds; but one need not condemn them too bitterly. Institutions of learning, founded with high purpose and at great sacrifice and performing yeoman service among the privations of the frontier might conscientiously (though illegally) aspire to a share of the public bounty. There was precedent for it. Moreover their distrust of the secular institutions was sincere and, from their point of view, it was well grounded. It is reasonable to remember, also, that such experiences were not the peculiar lot of any single university but inseparable from the circumstances under which the species was developed. Thus the very year (1855) in which the Wisconsin legislature was the scene of the most formidable movement to abolish the university and disperse its fund among the private colleges of the state, a similar assault upon the university fund was barely defeated in California, where the university had not yet been founded. Had either of these movements succeeded, it would have altered materially the history of state education in this country.

Since Wisconsin was the latest unit of the old Northwest to be taken up, it came in for organization when the state university idea was no longer a novelty. Its land grants were made as a clear matter of routine and the first steps toward the establishment of the university were taken with dispatch. The university was virtually coëval with the state. Nevertheless the university idea

was far from universally acceded to in theory and its practical working details remained to be evolved. Nominally, there existed state universities in several western states; actually, none of these had as yet realized the university conception. Upon Ohio had fallen the task of the earliest experiment. Two separate grants for "seminaries of learning" had yielded, on an unsuccessful leasing system, meager funds which had been devoted to the foundation of two distinct institutions, Ohio University at Athens and Miami University at Oxford, chartered, respectively, in 1804 and 1809, though the latter did not open its doors until 1824. It will be noted that these foundations antedated Virginia. Neither differed essentially from the old-fashioned classical college and neither had resources in sufficient abundance to give it a clear leadership in the state. Ohio became famous as the home of thirty colleges, but not for the strength of any particular institution. In Indiana, a vacillating policy as to the location of the university had resulted in a sectional conflict, tiresome litigation, and two institutions. Indiana College at Bloomington, founded in 1828, had taken the name of a State University in 1838 and opened a law department in 1840; but this institution had failed to secure a paramount place among the colleges of the state. In Illinois, it should be interpolated, the land grant had thus far failed of its purpose entirely. The lands had been hastily sold and the proceeds, under the fiction of a loan, promptly converted to the general uses of the state government. It was not until 1857 that the current interest on this nominal fund (back interest was not made good) was devoted to education, and then merely to the support of a State Normal University. The influence of private colleges is said to have contributed to the defeat of early attempts to found a uni-

versity in Illinois. Across the Mississippi, Missouri had provided for a university in its first constitution (1820) but had delayed organization for two decades. Its head since 1840 had been that "John H. Lathrop, the present accomplished president of the University of Missouri" who was called to Wisconsin in 1848. Missouri's finances had been ruinously managed. It had not progressed under Lathrop's presidency, nor did it progress until after the war, beyond the stage of a struggling college of liberal arts. Iowa, though it had entered the Union two years before Wisconsin, was a few months behind her in establishing a university and did not actually open a college of liberal arts until several years afterward. Obviously none of these examples afforded the counsel, or the comfort, of successful accomplishment.

There remains to be mentioned only the University of Michigan, from which, in effect, the Wisconsin leaders most immediately borrowed encouragement and positive example. The University of Michigan counts its anniversaries from 1837. It therefore antedates, in point of actual foundation, all the western state universities except the sterile foundations in Ohio. But more important than Michigan's priority of foundation was the success of its first thirty years, which brought it into conspicuous rivalry with the great private colleges of the East and conferred prestige upon state education throughout the West. Thus, though its earlier influence is by no means negligible, this was of inferior importance compared with the powerful impetus of its example during the widespread organization and reorganization of state universities which followed directly after the Civil War. Let us not infer that Wisconsin servilely followed the Michigan pattern. It is necessary, here, to keep a fairly strict chronology. It should not be overlooked that,

though Michigan had a start of approximately a decade, it had made but modest progress during that time and had encountered difficulties which led to fundamental changes in its organization two years after Wisconsin took its first steps. The latter worked out, in the course of its own experience, a system which differed significantly from that of its tentative model. But aside from its influence as a model, Michigan will furnish a needed standard of comparison when we come to trace in detail the proceedings in Wisconsin. The two were so nearly contemporary and neighbored each other in so many ways that the general conditions which backgrounded their early development are much the same. For all these reasons, the relation between them is of sufficient interest and importance to justify, in the history of the younger, a rather full account of the older institution.

The rise of Michigan was coincident with the intellectual movement which began to show vitality in this country, about 1830, in such phenomena as New England transcendentalism, the rediscovery of the European continent, more distinguished literary activity, an incipient demand for scientific enlightenment, more rational religious ideas, and other evidences of a new and more vigorous intellectual life. One phase of this awakening was a renewed interest in education and a growing discontent with its stereotyped forms. In the general movement the influence of German thought played no small part and, in the domain of education, German ideas and institutions were destined to work with increasing force for at least two generations. It is significant that the western world first gained a thorough acquaintance with the subject of German education through the medium of a French book, Victor Cousin's report to the French Minister of Public Instruction (1833), a thor-

ough, lucid, and professional exposition of the German system of state education, especially of that of Prussia.[1] Subsequently the influence of this noted document was supplemented by first-hand American studies such as Horace Mann's *Report on German Schools* (1834) and the voluminous writings of Henry Barnard, by the innovations of the former at Antioch College and the latter's work in renovating the common schools of Rhode Island and Connecticut, by the importation of German scholars into American colleges and the exportation of American students to the German universities. Roughly summarized the results of the German contact were (1) to bring into clear prominence the threefold division of education into primary, secondary, and higher; (2) to emphasize the interdependence and the need of correlation between the three divisions; (3) to throw stress upon the professional training of the teacher; (4) to call attention to the value of technical training in general; (5) to broaden and elevate the conception of higher education; (6) to strengthen by example the idea of government responsibility toward all these phases of education, but especially toward higher education, where example was most needed. Rev. John D. Pierce, Michigan's first superintendent of public instruction and chief author of its system of education, had made a study of Cousin's report and carried directly into the Michigan scheme many German devices. Some of these failed to endure the test of use and were afterward discarded; but the general logic persisted and gave a coherence to the system which recommended it to most of the subsequent builders of American states. A central university dominating and knitting up the educational

[1] *De l'instruction publique dans quelques pays de l'Allemagne et particulièrement en Prusse.* Paris, 1833. An English translation was published in London, in 1834.

activities of the state was the crowning feature of the plan.

A new and interesting educational policy would have availed little without a convenient financial basis, and here Michigan took counsel from the woes of its predecessors. The immediate means of its unique success was the relatively fortunate management of its land grant. In 1826, Congress had raised Michigan's seminary grant from one to two townships and had accorded the privilege of locating the land in detached areas of not less than a section each. The lands were selected early and proved to have been well chosen. Only a few sections were parted with in territorial days.[1] The state superintendent of public instruction, had charge of the lands during the first five years after the university was organized and he advocated a policy of gradual sales. He estimated that by such procedure a fund of one million dollars might be ultimately realized and still make provision for immediate needs, and he sold, during the year 1837, over one-seventh of the lands at a price which, had it been maintained, would have produced more than the estimated sum. But various causes, including private relief measures and sweeping reduction of price on the part of successive legislatures, resulted in confining the total proceeds of sales to a little more than half of the original computation. Even so, the average price realized upon all lands sold after the organization of the university was a little over twelve dollars an acre. Considering that in 1850 the cash value

[1] Two sections, famous as "the Toledo lands" because, later on, they turned out to be located "in the heart of the city of Toledo," were among these and have been the subject of much threnody. There are few dealers in land who cannot point to fortunes which might have been theirs, "if their foresight had been equal to their hindsight." Such might-have-beens would seem to be as futile in the case of a public trust as of private investments.

of all Michigan farm lands, improved and unimproved, as estimated in the United States Census of that year, yields an average of just about $12.00 an acre, this cannot be considered a bad record. It was in fact triple the rate realized upon any other university grant in the Northwest Territory.

As a result of this management the University of Michigan enjoyed, except for a short period in the early forties, financial resources fairly adequate to the work it set out to perform. At the outset Superintendent Pierce projected an ambitious system of Branch Schools, obviously suggested by the gymnasia of Germany. The quick returns of 1837 made it possible to set some of these in immediate operation. Seven of them were eventually started and the university expended about $35,000 in this way. Later they proved too great a drain on the fund and were discontinued (1849-50).[1] In the meantime they had preëmpted ground which might have been occupied by denominational foundations such as the superintendent vainly tried to have prohibited by legislation. Also, they gave an early and much needed lift to secondary education. In both respects, they worked to the advantage of the university.

A loan from its own fund in 1838 enabled the university to erect the necessary buildings and, while this crippled its income for a number of years, the legislature of 1853 came to the rescue by ordering that "the entire amount of interest . . . on the whole amount of

[1] The university clause of the Wisconsin constitution provides for "such other colleges in various parts of the State as the interests of education may require." It is interesting to note that this feature was incorporated in the Wisconsin constitution on the very eve of its abandonment by Michigan Missouri and Iowa adopted similar provisions. Wisconsin proved to have no funds for such costly experiments; the place of the Junior Colleges here contemplated was ultimately filled to a certain degree by the state normal schools.

university lands sold" should be thereafter paid to the university. Subsequently (1877), the principal of the loan was transferred to the university account, thus retrospectively converting the original loan into a gift. This, and the privilege, given in 1844, of receiving payment for university lands in depreciated scrip and crediting the same at par, constituted the nearest approach to state aid received by the university previous to its first direct appropriation in 1867.

The bad investments which depleted many university funds were completely avoided. The proceeds of the land sales were loaned entirely to the state and the interest constituted the current income of the university. The highest annual expenditure down to 1851 was $19,683.85. The removal of the building loan incubus in 1853 brought sudden relief and by the gradual sale of lands and increase in student fees, the annual income crept up to about $60,000, where it hovered until appropriations began. For a number of years these sums were regularly voted by the legislature, but by the reorganization under a new state constitution followed by legislative enactment, in 1850-51, the university finances were placed fully in the control of the board of regents. At the same time the appointment of the board was taken out of the hands of the governor and senate and consigned to the people on the same basis as the judiciary. So long as it made its income suffice, the university was largely emancipated from the legislature. This situation endured over fifteen years at an important epoch in its development. During the pioneer stages of legislation probably this estrangement was advantageous; it is doubtful if it proved so after the university had greatly outgrown its own income.

Previous to the reorganization just mentioned, which it will be noticed was shortly after the organization of the University of Wisconsin and exactly synchronized with the formation there of the first college class, Michigan had existed solely as a college of liberal arts. Its first organic act had called for three departments; a department of Literature, Science, and the Arts; a department of Medicine; and a department of Law. The great development which awaited applied science was but faintly appreciated when the Michigan act was drawn; it was anticipated that all the requirements in this field of instruction would be met by the expansion of the first department, a line of evolution which was eventually followed in Wisconsin. The first department had opened in 1841 with six students and, after 1843-44, graduated upwards of ten men each year. The department of medicine did not begin operations until 1850 and the law department not until 1859. Thus far, Michigan had not differed materially in curriculum and discipline from the old-fashioned classical college. Dormitory residence was provided for students and the faculty were housed on the campus. Instruction was supposedly non-sectarian, but popular anxiety as to the religious atmosphere of the university was allayed by composing the faculty chiefly of ministers from the various denominations. With the best of intentions, however, it was found difficult, under these circumstances, to secure harmonious action. For this and other reasons, the German rectorial system of internal government which had been adopted for the faculty was recognized as unsuited to the American border, and, among the new features of the reorganization of 1850-51, a presidency was wisely included.

The new executive office was filled in 1852 by the

election and acceptance of Henry P. Tappan. His election was reported as unanimous and is frequently so recorded; but on the first ballot, John H. Lathrop, then chancellor of the University of Wisconsin, had received only one less vote. Henry Barnard, who became Chancellor Lathrop's successor at Wisconsin seven years later, had been elected to the Michigan presidency and had declined previous to the election of President Tappan. There can be no question that here again, Michigan was favored by fortune. It secured for its first president a very unusual man singularly fitted for the task to which he was called. A scholar of rare gifts and commanding spirit, abreast of the age and in the prime of his powers, President Tappan went to Michigan highly conscious of his great and interesting adventure. He had studied abroad, was deeply imbued with Prussian ideas of education and impressed with the opportunity for their plantation in the free fields of the west. His able policy and inspiring ideals dominated Michigan counsels for a decade and wrought as traditions after he had disappeared in clouds and fulgurations. At a period crucial not only for Michigan but for the entire state university movement, he supplied the indispensable force of vivid personality.

Michigan forged rapidly ahead. The financial relief which has been mentioned came promptly. The era of expensive equipment for scientific education had not yet arrived. Men and books were the chief essentials in all departments, and the scale of salaries throughout the country was low. President Tappan cleared the dormitories for more strictly educational uses and thus made room for the university without further outlay for buildings. The professional departments proved popular and, by the end of the period under consideration, far sur-

passed the central college in enrollment. The scientific movement was recognized by providing a special course leading to the Bachelor of Science degree, which Michigan conferred for the first time in 1856, being the second institution in the country to do so. Extension into the fields of applied science soon followed. Michigan was felt to be in the van of education; the state university idea seemed both liberal and democratic, and, however "old fogies" might regard it, appealed to the rising social consciousness of that day. The university was soon in undisputed command of the educational forces of the state and drawing largely from without its borders. It was, as a fact, the most competent institution of superior instruction west of Philadelphia; it was easily accessible to western New York and Pennsylvania, to Canada, to Ohio, Indiana, and Illinois; an almost nominal tuition doubtless added to its attractiveness. By 1867, Michigan, at an annual expenditure of less than $60,000 was supporting a large corps of professors, many of them scholars of considerable repute, and in that year supplied instruction to 1,255 students drawn from two-thirds of the states of the Union. The legislature inscribed another flourishing rubric under this date by making its first direct appropriation for the support of the university; it was the first to be received by any of the institutions foreshadowed in the *Ordinance* of eighty years before. The University of Michigan had "arrived."

The early course of the University of Wisconsin is in striking contrast to this prosperous history. Estimating progress by magnitude, forty-four years were to elapse after it was founded before it reached the mark which Michigan had set at the end of thirty. After something more than a decade spent in gathering funds and

in preliminary experiments, Michigan had reorganized and entered upon the brilliant epoch sketched above, just as Wisconsin, with those experiments for guidance, was engaged in the first stages of organization. At the end of that period, the latter, still feeble, was in the throes of the final reorganization which placed it at last on the basis that led to a career of consistent growth. Not until 1892, a quarter of a century later, did Wisconsin show upon its rolls as many students as Michigan had gathered together in 1867. Yet most of the general conditions which conjoined to procure the success of Michigan were equally favorable to Wisconsin. If we would find the reasons for this striking difference in growth we shall probably have to seek for them chiefly in particular circumstances and in turns given to events by particular persons and combinations of persons, rather than in the general conditions which environed the two universities. The particular events will naturally constitute the chief substance of our history; a brief discussion of the general conditions which environed the two universities, will serve to bring into prominence some salient features of that history and perhaps shed significance upon the details that crowd subsequent chapters.

In the character of their population and the time and pace of their material development the two states were not dissimilar. Both were clear northern, without that overlapping of the southern zone which complicated the affairs of all other states made out of the Northwest Territory. The acuteness of sectional feeling at the time made this a matter of no small moment. In both states, the native families from New England, New York, and upper Ohio were the dominant element in political and social life throughout the formative period. Both had a

large foreign element, but Wisconsin a much larger,[1] and this fact coupled with Michigan's propinquity to the East tended to a slightly longer and stronger dominion of the elder culture in the older state, with results too complex for analysis. Both had to contend at the outset with the rudeness of the frontier, and the keenest sacrifice which the pioneer pays to new fortunes is that of his children's education. A struggle for life's mere necessities leaves little room or inclination for the improvement of the mind. In a pioneer society, whatever the culture of the first generation it passes with difficulty to the second, and thus a whole generation may slip, not only to a lower level of knowledge and refinement, but out of sympathy with them. Frontier society is essentially undisciplined and begets a temper the reverse of academic; where life is rough and opportunity rich, the frequent material success of untutored mother wit tends to throw contempt upon learning. Michigan and Wisconsin did not escape these inevitable conditions of frontier life; but they suffered from them far less than regions that were opened earlier, such as Ohio, Indiana, and parts of Illinois and Missouri. Wisconsin shared with Michigan a rapidity of settlement which left no time for such retrogression. Steamboats, railroads, machinery, and a world-wide movement of peoples facilitated their development. Even the first generation lived to see the end of pioneer trials and participate in the wonders of the new civilization. As immigration continued to be active well through the formative period, the earlier pioneer group was reinforced by fresh ar-

[1] In 1850, Wisconsin had a population three-fourths that of Michigan and had double the number of foreigners. Differently stated, thirty per cent. of the inhabitants of Wisconsin, about fourteen per cent. of the inhabitants of Michigan, were foreign born.

rivals with somewhat more exacting ideas of civilization, from the older centers of population and culture. The swift coming of prosperity, therefore, placed the improvement of education in the hands of a people who, without having lapsed into ignorance of the older institutions of the East and of Europe, were, by natural selection and by experience, emancipated from them. Being of a temper to embrace innovations, they speedily contrived institutions for themselves which they conceived to be in harmony with their novel necessities and with advancing knowledge.

But the material developments which were contemporaneous with the foundation of Michigan and Wisconsin had a bearing even more direct upon the fortunes of the universities. The improvements in transportation, which facilitated settlement, also greatly favored the centralization of educational opportunities. As distances became less formidable, there was less reason for each section of a state to insist upon an institution of its own. In this particular the universities of Michigan and Wisconsin had great advantages over earlier foundations in regions that remained for a long time sparsely settled. Further, whether for good or ill, the rational spirit which accompanied these developments was everywhere weakening the force of religious, especially of denominational sentiment; and, whatever it lacked of the enlightenment which elsewhere made for the broadening of religious truth, the frontier made good by an intense positivism which did not leave it behind in abandoning the ancient standards. Michigan and Wisconsin still had sectarianism to deal with; but it was a sectarianism much cooled from that of a generation earlier, and no longer a commander of popular majorities. In Wisconsin, more particularly, there was added to divergencies in religious

views, diversity of language and nationality. Both at first produced distrust of higher education by the state; but this very miscellaneity tended to destroy itself. In a society relatively equal and generally ambitious, it soon dawned upon the more intelligent that no sect or nationality could provide advantages for a part comparable to those which the state could provide for all. The universities themselves constantly augmented the flood of sterilizing ideas which washed away these demarcations. Centralization once effected, the very magnitude of the enterprise captured the popular imagination, always alert to this appeal, and, as the means of the state institutions became adequate to their objects their supremacy over sectarian rivals was sealed by the economic phase of scientific and technical education. These became so enormously expensive, as to be hopelessly outside the range of the smaller endowed colleges. What was true, in all these respects, of both Michigan and Wisconsin should have been more notably true of the latter and ought to have worked as promptly, for it began later and, as has been previously shown, no state, up to that time, had developed so rapidly. Glancing ahead, we find that, by 1870, Wisconsin virtually overtook Michigan in wealth and taxation.[1] That the very swiftness of this development registers a countervailing feverishness in business affairs which temporarily worked against intellectual interests is not beyond conjecture, as we shall directly notice. Balancing everything, however, it would not be easy to make out that, except for its ten years' lead in point of settlement,

[1] The United States Census of 1870 gives as the total assessed valuation of Michigan, $272,242,917; of Wisconsin, $333,209,838. It gives as the true valuation for Michigan, $718,208,118; for Wisconsin, $702,307,329. The total taxes raised were, in Michigan, $5,412,957; in Wisconsin, $5,387,970.

Michigan enjoyed any very definite advantage, on account of its general social and cultural conditions.

In the realm of politics the situation of Wisconsin was different. The anxiety to hasten the material development of the state encouraged policies, and the great enterprises that hurried it on brought abuses, which bore directly upon the immediate fortunes of the university and proved fatal to them. Notwithstanding the experience of others, the legislature of the state showed a disposition from the beginning to keep the university finances under a close control which later legislatures rather stiffened than relinquished. Probably at first this policy was only misguided; but later it took on a more sinister aspect. About 1850, the railroads began to enter the Mississippi Valley and blew political pestilence in their van. Their coming was contemporaneous with the mania of speculation which culminated in the disastrous panic of 1857, and this was at its height during years that were crucial for the University of Wisconsin. Speculation in public lands was one phase of this general commercial phenomenon. As large quantities of public land had been set aside for the encouragement of railroads, their influence immediately pervaded this domain. It was the first apparition on a large scale of the malevolent influence of corporations in American public life. The lobbies of the provincial legislatures swarmed with a brood of promoters and seducers, many of whom, as individuals, were very different from the men who made up these bodies, and some of whom succeeded in entering public life. For a time the crude political machinery of the frontier was demoralized. In Wisconsin temptations converged upon political life which a few men in critical positions of trust (unsafeguarded as yet, and unwarned by positive legislative

enactment as to their duties and emoluments) were unable to withstand. School lands and university lands alike were sucked into the vortex of politics and speculation. The result was even more disastrous to the university than to the schools, for it had no other resources and was not to have for many years to come. Thus, from twice the quantity of land, Wisconsin derived a university fund not much more than half that of Michigan.[1] The discrepancy, as has been shown, is often exaggerated through a failure to take into account the difference in the ruling prices of land at the two periods; but, after due allowance has been made, the waste attributable to mismanagement and dishonesty was grievous. The ground of public policy upon which cheap and quick sales were defended was that they would hasten immigration. The flimsiness of the argument can be easily shown and many knew it to be specious at the time. But not only were the lands too cheaply sold; the proceeds were put out in small private loans many of which were said to have been distributed as political favors, and the funds were disastrously mismanaged by some of the public officials to whom they were entrusted. The period of corruption was brief but it was sufficient; before the state could rouse itself, irretrievable damage had been done to the national endowment.

Probably we need seek no farther for the causes which compelled the University of Wisconsin so long to lag behind its great rival across the lake. Of course there were contributory causes. Michigan was singularly favored in its leaders, especially in its first president. It was fortunate in the time at which its lands were placed on the market. Most of the legislative assaults

[1] Further details in regard to the university lands will be found in a later chapter; only their general bearing on university history requires notice at this point.

upon its fund were in the interest of private relief; by the time the organized corruption had begun to operate which was so fatal to Wisconsin, Michigan was a more settled and experienced state than Wisconsin. Again, by its more favorable start, the University of Michigan gained a momentum which carried it triumphantly over the period of financial depression following 1857 and enabled it to continue vigorously throughout the war. Since it had its own income, indeed, the financial disasters of 1857 affected it little and may even have enhanced the lure of its cheap tuition. The University of Wisconsin, on the other hand, might have recovered more promptly from the early disasters to its funds, but it had no sooner begun to recover than the panic of '57 struck dead all hope of assistance from the state, and the war, following hard upon, almost obliterated what remained of the institution. When all is said and done, it remains obvious that Wisconsin's failure to develop strength in its university during the first twenty years is most directly traceable to the demoralization of its political affairs in the middle fifties.

The events of these years were of incalculable significance in their ultimate effect upon the university's relation to the state. With its land fund almost annihilated, the university was thrown upon the bounty of the state, while the state had incurred for all time an obligation which it was sure, in time, to recognize. Thus the two were knit together more firmly than otherwise they might have been. There is poignant irony in the consideration that grave abuses in the public service should have been the means of bringing into close dependence upon the legislature a university which, as it gathered strength from that very closeness of association, was to weave its men and measures into the texture of the state service

and make forever impossible a recurrence of the political misdirection which had cost it so dearly in feebler days.

As concerned its relation to specifically educational ideas, Michigan had had the advantage over all the states previously established in the wilderness, that it came unencumbered to its organization at a time when a new and clearer theory of public education was available. In the brief interval between its formation and that of Wisconsin these ideas had become more widely disseminated. In addition, Wisconsin had a definite working model near at home. Its educational system from low to high was avowedly planned after that which was already on trial in Michigan.[1] But already the conception of the possible scope of a state university had broadened. Two needs of the frontier stood out boldly: the need of trained teachers and the need of industrial education. Agricultural societies and writers increasingly emphasized the desirability of instruction in scientific agriculture. For a time there was an odd antipathy toward it on the part of the farming class,—an example of that ingrained resentment of the "practical man" against "theoretical" invasion of his field which has opposed the march of science in almost every sphere of human activity. On the other hand, as soon as the virgin soil began to show signs of diminishing returns, the eager practicality and progressiveness which inhered in the frontier citizen would enlist his interest in this form of education.

Here again, Michigan pioneered. Its new constitution of 1850 demanded a state agricultural college and the legislature petitioned Congress for a grant of lands to aid the project. This failing, the legislature of 1853 set

[1] See *Report of Committee on Education and School Lands. House Journal*, 1848.

aside a part of the saline lands which the state had received for general purposes, added an appropriation of $40,000, and, in 1857, Michigan opened "the first Agricultural College in America." It was, however, entirely distinct from the university, and was destined to remain a separate institution. The same year, Illinois turned over the shreds of its seminary grant to a State Normal University. Contemporaneously, the Wisconsin leaders were struggling to bring into effect a university wherein both these activities of the state in higher education should be consolidated, along with the other departments of a university, into a single institution. The original Wisconsin charter of 1848 had gone beyond the Michigan scheme in the addition of a "department of the Theory and Practice of Elementary Instruction," while the early expressions of the chancellor and regents and the deliberations of the legislature contain frequent references to a separate department or college of Agriculture which should be a part of the university. The disasters which befell the university fund postponed the realization of these plans for nearly twenty years. So far as they concerned the Department of Agriculture, they were eventually operative. Except for accidents which will be detailed in a later chapter, it is likely that the pedagogic system of the state, also, would have come under university direction.

Meanwhile, the appeals of Michigan and others had borne fruit. In 1858, the friends of agricultural education succeeded in getting through Congress a bill which provided for the aid of agricultural colleges by gifts of land to the various states. It was a moment when any question which even remotely involved the doctrine of state rights was an invitation to battle. President Buchanan promptly vetoed the bill. Four years later

was introduced the similar measure now so well known as the Morrill Act "for the encouragement of Agriculture and the Mechanic Arts." Most of those who had opposed the earlier bill were either in Richmond or with the confederate army; the new measure passed without opposition and was signed by the hand that penned the Emancipation Proclamation. Thus it happened that this great act for the upliftment of the arts of peace stood by to play its part with the other powerful forces which brought about the nation-wide movement in state education directly after the Civil War.

As Michigan's Agricultural College was already in active operation it naturally fell heir to the benefits of this act, and the cleavage was accentuated between its liberal and professional schools on the one hand and its schools of applied science on the other. Ohio, Indiana, and Illinois all founded separate institutions on the basis of the new grant. The present state universities of Ohio and Illinois have developed by liberalizing their industrial universities. Wisconsin's evolution has been the inverse of this. Her first ideal of a single university for the state prevailed over all calamities. Notwithstanding early retardations, she was the first of the state universities of America, and the only one in the territory of the Old Northwest, to realize in her organization the full logic of the state university idea. Iowa had already founded a separate College of Agriculture and followed the same course as Michigan; Missouri, California, Minnesota, Kansas, and Nebraska followed the plan, if not the example, of Wisconsin; among the younger states policy has not been uniform.

To discuss, adequately, the merits of the two systems just indicated would carry us far beyond the limits of this chapter. Few will dispute the merits of the cen-

tralized plan from the standpoint of economy. It may be alleged, in behalf of the college of liberal arts, that "the quiet and still air of delightful studies" can be kept purer in institutions exempt from the more practical phases of university education. It may be responded to this that whatever refinement the central college of liberal arts in a state may gain by this academic seclusion, its technical and utilitarian departments will lose, to make nothing of the point that a breeze now and then is better than stagnation, even in the still air of studies. On the whole there cannot be much doubt that, whether on the lower plane of practical economy or in the interests of the widest diffusion of culture for the state, that type of institution has most in its favor in which "The languages, the modern humanities of political economy, political science, history, and sociology, and the pure sciences, . . . *are like the palm of the hand from which spring the fingers of applied knowledge*—medicine, law, engineering, agriculture, etc."[1] Given the right faith of their professors, the humanities and sciences need not ask a nobler chance, or a fairer field than to be arrayed in a central college which, with no sacrifice of its own integrity or its devotion to purest learning, leads out on every side into a university concerned with the actual vocations of men. Whatever may have been their limitations of vision in matters of detail, this, in general, was the kind of university which the Wisconsin founders had in mind for the state. They would have felt nothing alien to their thought in the words of President Van Hise when, after the developments of half a century, he pleaded in his *Inaugural Address* for a university "as broad as human endeavor, as high as human aspiration."

[1] Charles R. Van Hise, *Central Boards of Control.*

Historically, as well as organically, the University of Wisconsin fully embodies the conception of a state institution of superior instruction evolved out of a central college of humanities and pure science, in continuous response to the advancement of learning, on the one hand, and the requirements of society on the other. Its history falls naturally into three periods: (1) the period of tentative effort to the end of the Civil War; (2) the period from 1866 to 1887, when the central college was perfected and won the confidence of the state; (3) the period of university expansion from the last date to our entrance into the European War. In the present chapter, we have indicated its origins and sketched the background of its earliest period. So far, its position had been inconspicuous. In the reorganization at the end of the Civil War the ideals of the founders were given clearer scope and in the pursuit of those ideals the university entered upon a career of gradually widening usefulness and influence which has suffered no disastrous check since that time.

One may see in this development the rise of a social institution of no small importance. Its development is still incomplete; but so far as it can be traced, one will be conscious of the interplay of two great currents of opinion and influence. On the one hand there is the influence of ideas and of the intellectual leaders who champion them; playing against this there is the current of popular need and desire, which in Wisconsin has had special force because of the university's close relation to the state. This university has grown up like other state universities not as a mere embodiment of theoretical ideas, but by a fitting of means to ends in a particular medium of frontier surroundings. Yet it has not so grown, as must be already evident, without a response to

outside ideas and movements which lend it, finally, something more than a provincial significance. The next few chapters tell of small and sometimes mean beginnings; mistakes, reverses, disappointments, infinitesimal triumphs; but, as with all beginnings of great enterprises, their interest is independent of the scale on which they were wrought.

THE STATE CAPITOL AT NIGHT

III

THE TOWN AND THE CAMPUS

THE relation which the university would sustain to the state was implied in its location. From the time of the earliest territorial action it was ever the prevailing doctrine that the university must be situated "at or near the seat of state government." As to the location of the capital itself, it constituted one of the first questions to come before the territorial legislature and its ghost revisited state councils at intervals for upward of a generation; its initial settlement required a month of deliberation and virtually created the city of Madison. A combination of nature sentiment, mutual sacrifices, private "log-rolling," and fine contempt for the hazards of the wilderness,—all very characteristic of our pioneer law makers—attended the accomplishment of the act.

Dane County, as set off by the first territorial legislature when it came together at Belmont in the autumn of 1836, was part of a large interior tract unpenetrated by any of the military roads or navigable waterways, and did not contain a dozen whites. On the north, it was skirted by the old military highway from Fort Crawford (Prairie du Chien) to Fort Winnebago (Portage) and on the south, by a broad, ox-train road from the mining region in the southwest to Milwaukee on the lake front. From Fort Winnebago to Green Bay ran the excellent road which Captain Marryat found the following summer on the famous journey referred to in a preceding chapter. A road parallel to the Mississippi

connected the two transterritorial lines in the west. At its southwest corner, Dane abutted on Lake Koshkonong, whence southward, the Rock River was thought to be capable of improvement for navigation. This view proved oversanguine; but the lands along the river and its small Wisconsin tributaries promised a swift development. A vigorous agricultural population occupied them so promptly that, by 1850, the county of Rock had a larger acreage of improved farm lands, and, except Milwaukee County, a larger number of inhabitants than any other in the state. Every one of these regions had its aspiring villages, each with its singular claim to the prize of the capital location,—a score or more in all. Election evaded them all and fell upon an unimproved spot in the midst of the interior.

It is not altogether a bad description of early Madison to say that it stood at the head of navigation on the Catfish. The Catfish—in jest and song, the Yahara—is a small, very crooked, very charming stream, highly navigable for Indian dug-outs and craft of similar tonnage, which meanders diagonally through some twenty miles of Dane County and slips into the Rock a few miles below Lake Koshkonong. Strung along its upper course, four brilliant lakes gave the name—Indian "Taychoperah"—to this The Four Lakes Region of Wisconsin. Between the two uppermost lakes, Third and Fourth, or Monona and Mendota respectively, upon a wooded ridge, hour-glass shaped, from half a mile to a mile in width, and three miles in length, intersected at the eastern end by the Catfish and indented on the west by still another lake and its tributary marshes, almost at the center of Dane County, lay the hypothetical city which was presented to the territorial legislature under the name of Madison. Madison's champion was a terri-

torial judge, James Duane Doty by name. In a legendary "green cloak," with an equally legendary shotgun slung to his saddle, Judge Doty had threaded the Wisconsin wilderness from end to end. His practiced eye had alighted upon this pearl of sites and he had singled it out for the choicest place in the state's coronet of cities. It was due chiefly to his influence that the bluff-browed frontiersmen at Belmont so engagingly fixed the capital of their state in a nook of the forest, leagues from any road and yet unmarred by human habitation.

A diagram of the proposed town based on meanders run for Judge Doty by John V. Suydam, District Surveyor, was certified by the latter at Green Bay, October 27, 1836,—two days after the legislature convened at Belmont. The plat indicates, as the town's central feature, a square nine hundred and fourteen feet in diameter, so set with the plan of the streets as to have the appearance of a diamond. This square is "donated for public buildings." The donors were Judge Doty and ex-Governor Stevens T. Mason of Michigan, who owned, in partnership, over twelve hundred acres of land within the limits of the plat. The former had hurried to Belmont and pushed the Madison interest with prodigious endeavors, partly from genuine love for the spot and partly for other reasons not far to seek. It is well known that deeds to Madison corner lots were among the arguments by which he prevailed with the pious founders.[1] However, the necessity of compromising upon some central location and the desirability of stimu-

[1] At least one noteworthy exception is recorded. A strong antipathy existed between Judge Doty and Henry Dodge, then Governor of the territory, and there were fears that the Governor might veto the bill. However, Governor Dodge strongly approved of the location though not of Judge Doty's methods, and he ratified the action of the legislature. Judge Doty waited upon the Governor, expressed his appreciation of the favor, and suavely

lating settlement in the interior were powerful considerations; while, among rivals in its immediate neighborhood, Madison was easily supreme in the supposed healthfulness, and in the undeniable elegance of its site.

The nineteen-acre "Square," above whose central point more and more stately domes were to succeed each other, topped a swell of land near the Monona shore of the isthmus. Streets designated by taking off the sides of the square and erecting perpendiculars to the middle of each side, formed the basis for the rectangular plan of the town; the diagonals of the square produced toward the points of the compass, lined out four additional thoroughfares which intersected the rectangular plan and gave to the town its abundance of triangular blocks and flatiron corners. The plan was further diversified by partly conforming the lengthwise streets along each side of the town to the contour of the lakes.

The diagonal which followed the section line due westward from the capital diamond established King (present State) Street. In this direction, the land tilts gradually downward almost to the level of the upper lake, then rises abruptly and, at exactly a mile's distance from the crown of the capitol hill, attains its most commanding elevation close to the shores of Lake Mendota. The original plat of the town ran to the base of this eminence which soon came to be known as "College Hill," from a very early belief that it would be chosen—as in due time it was—for the site of the state university.

Madison made feeble progress during its territorial

suggested that he would be gratified if the Governor would consent to become the recipient of a few choice lots. Thereupon Governor Dodge is said to have risen to the full height of his splendid presence and thundered forth the following: "Judge Doty, sir, when I need any lots in Madison, sir, I will call upon you, sir,—by God, sir!"

decade. It was situated in the midst of an undeveloped region, remote from the chief lines of communication. Much of the area in its immediate neighborhood was in the hands of land speculators; much was occupied by lakes and impenetrable marsh lands. Its location was little calculated to foster commercial development. Settlements began early in 1837, in connection with work on the new capitol building; but after two years, the town had accumulated only one hundred and forty-six inhabitants, and it gained but seventy more in the ensuing five years. After ten years of existence it contained less than seven hundred people. The statehood agitation in 1846, the arrival of the telegraph the following year, connecting the village a little more closely with the outer world, were followed in 1848 by the accomplishment of statehood and the location of the university, and the town seemed somewhat more secure of a future. The next year, Madison acquired a vigorous captain of industry in L. J. Farwell. He set up mills on the Catfish and laid out a large addition at the east end of the town. With other local "colonels" such as Fairchild, Mills, and Vilas, he pushed business, had prepared maps and prospectuses advertising the opportunities of the place, and gave to the sleepy hamlet something of a spirit of enterprise. In three years preceding 1850, the town doubled in size, and this period was followed by a lively little boom which brought the population of the "Capital City" in the next half dozen years, close to seven thousand.

Hitherto, Madison had existed almost solely by virtue of its official character as the seat of government. Everything from business to religious worship faced the capitol square or the adjacent streets. The residential district was nearby, along the shore of lagoon-like Lake

Monona. Westward and northward the oaks and hazels held undisputed sway. The raw little town and its empty backwoods hotels dreamed away the summers and each winter awoke to a brief period of crowded life when the legislators poured in for their annual session. They were periods, too, when the town trembled for its very existence. Then, as long after, there was rarely a session that did not produce a more or less formidable attempt to remove the capital to Milwaukee, which by 1850 had become a bustling metropolis of twenty thousand people, equal with Detroit and temporarily rivaling Chicago. Fortunately, a majority always recognized that the metropolis exerted quite enough influence upon legislation across the safe interval of eighty miles.

The capital seethed with political machinations. Public funds and institutions were generally dealt with in the light of a division of spoils, and Madison, as a too lucky recipient of public favors, was regarded with spiteful envy by rival cities whose resources were more purely industrial. The university, after its establishment, became a conspicuous target for malicious reprisals animated by this sentiment. Forced by circumstances into the character of a local institution, it had to run the gauntlet of sectional animosities before it could win its place as an organ of the state at large.

The first half-dozen years of the university coincided with Madison's expansion from a backwoods village to a small city with some pretensions to the advantages of civilization, one of which was the university itself. The rise of the first building on "College Hill" in 1851, the establishment of two daily newspapers in 1852, the opening of the first bank in 1853, the arrival of the railroad from Milwaukee in 1854, the organization of the Board of Education in 1855, were indexes of the city's

varied progress and influences toward riper times. During these years most of the churches were built which served Madison for a generation, many of which serve it still. Among these was the old red brick of the Baptists, core of the present telephone building, erected in 1853 opposite the capitol square. Having one of the best audience rooms in the city, it sheltered for a number of years most of the public exercises of the university, including those of its first commencement. Its basement was, for over a decade, the depository of the collections of the Wisconsin Historical Society which had been founded in 1849 but was first effectively organized in 1853-54, under the secretaryship of Lyman C. Draper, who was to render distinguished services in that capacity for thirty-three years. About the same time an association, with the chancellor of the university as its first president, undertook the promotion of a city library. A theater had been erected by popular subscription, and Madison soon found a place in the itinerary of the best traveling companies. The winter after the railroad arrived, the city supported a lecture course which brought to it such well-known writers as James Russell Lowell, Parke Godwin, John G. Saxe, Horace Greeley, and Bayard Taylor. There were concerts by Ole Bull (1857) and a visit and educational lecture from Horace Mann (1858). Madison was becoming something of an oasis in the intellectual desert of the frontier. Families who would have shrunk from the social privations of the average western village were now attracted by the fame of its beautiful surroundings and its prospects as a center of cultured life.

"'As beautiful as Madison' has been a household word among tourists in the Northwest," wrote a correspondent of the Chicago *Journal* in 1852. The year before, Cur-

tiss' *Western Portraiture*, a prospectus of the Northwest, had reached its most grandiloquent in the description of Madison's "bright lakes, fresh groves, and rippling rivulets, its sloping hills, shady vales, and flowery meadow lawns . . . commingled," says the writer, "in greater profusion and disposed in more picturesque order than we have ever elsewhere beheld." More responsible writers were equally impressed, if not so abandoned in expression. "Madison," declared Horace Greeley in a letter to the New York *Tribune* (March, 1855), "has the most magnificent site of any inland town I ever saw." Bayard Taylor almost echoed his words in a communication to the same journal two months afterward. Horace Mann, like the rest, was most struck "by the beauty of the locality in general, especially that of the site of the state university." The laureate seal was felt to have been attached when, twenty years later, "The Four Lakes of Madison" were celebrated by a poet who had never seen them, the amiable Longfellow.[1]

It was as a seat of learning that "the fair city of the West" made its strongest claim on the imagination. It would not be easy to exaggerate the charms of the university grounds in these early days. The accumulated structures of later years have somewhat overpowered their surroundings. Then, the two or three buildings embowered among native trees, looked off upon a wide prospect in every direction and met the eye from every point. Eastward, the village with its spires pushing up among the oaks and, beyond, the lakes streaming to the horizon; northward lay Mendota encircled by its lime-

[1] Lowell too wrote of it in his letters; but he visited the place in winter and was chiefly impressed with the coldness of everything, especially of the "three cold fishtails" which the reception committee successively laid in his hand. It is a passage which rival cities that have upbraided Madison for its lack of social warmth would be glad to find.

stone bluffs and wooded hills, the largest and most gleaming of the four lakes, with a unique command of color and remarkable grace of outline. The spot was one to woo the youthful heart. Something of this early charm throws its spell over the closing pages of John Muir's *Autobiography*. Describing the day he left "on a botanizing and geologizing excursion which has lasted for over fifty years," he concludes, "From the top of the hill on the north side of Mendota I gained a last wistful lingering view of the beautiful university grounds and buildings where I had spent so many hungry and happy and hopeful days. There with streaming eyes I bade my blessed Alma Mater farewell." From that idealized reflection, shimmering in eyes which, since the recorded day, had roved over many sublimer sweeps of mountain and of glacier, we gain a fleeting impression of the campus at Madison as it lies in the recollection of those who have loved it in their youth.

The working basis for the university campus was a quarter section of land which had been selected by James Duane Doty for Aaron Vanderpool of New York in 1836 and by the latter purchased from the government, for a dollar and a quarter an acre.[1] At the first and apparently the only meeting of the territorial "Board of Visitors," December 1, 1838, John Catlin, secretary of the board, acting as agent for Vanderpool, proposed a donation of certain parts of this land to the projected university. As Vanderpool had never seen the land, there is little doubt that the idea of thus enhancing the value of his acres originated with the agent Catlin. The latter continuing to reside in Madison was probably in-

[1] Technically described as "the N. W. ¼ of sec. No 23, T. 7 N. of R. 9 E. (except block 9 of the village of Madison)."

fluential in keeping the tradition alive. At any rate, the popular fancy had long dedicated the spot to education, bestowing upon it the nickname of College Hill. The board of regents, at its first meeting, appointed a committee to find out the conditions upon which the property might be secured, and this committee was able to lay before the second meeting a definite proposition from Catlin and Williamson, Madison agents of Vanderpool. The owner had now held the land for twelve years and, probably disappointed in the progress which the city had made, he expressed his unwillingness to sell in parcels, but offered the whole tract at fifteen dollars per acre, plus a year's taxes and the agent's commission. The regents promptly closed with this offer and appointed a committee to complete the purchase and to secure such other parcels as were necessary for rounding out the site. The charge was directly executed. By pledging its credit for something less than twenty-five hundred dollars the university became possessed of 157½ acres of choice land at the end of the village of Madison.

The portion of the purchase which was deemed unnecessary for the college site was "laid out in 174 village lots and 12 five-acre or out lots" and sold, part of the proceeds being applied to canceling the debt on the whole. The regents justifiably plumed themselves upon this turn; but eventually much of the property thus disposed of had to be repurchased by the university at heart-breaking advances in valuation. Exchanges were effected with the real estate firm of Delaplaine and Burdick between certain lots held by them and parcels of equal value chosen by disinterested commissioners from the Vanderpool purchase. A few lots held by other owners were bought outright. By these processes

the university secured a plot of about forty acres,[1] bounded on the north by Lake Mendota, on the east by the line of present Park Street, on the south by the old Mineral Point Road, now University Avenue, and on the west by the drive to be opened from the last-named street to the lakeshore. These are the outlines of the present "Upper Campus," still the central building spot of the university. The "Lower Campus" and all the university holdings east of Park Street were combined out of village lots; these, as well as the broad sweep of hills and lowlands along the lakeshore to the west, have been acquired by miscellaneous transactions scattered through later years. The founders obviously thought that in their provision for its site they were amply anticipating any development of the university; but glowing as were their sentiments, this, like every other numerical measure of their conceptions, reveals how faint were their powers of estimating the future.

To make this forty-acre hill habitable for learning was the important material task which fell to Chancellor Lathrop on his arrival in the autumn of 1849. The regents in their first report to the legislature had stated that they were uncertain what portion of the university income might safely be expended for building purposes, and they had recommended that "one building of moderate dimensions" to cost about $3,500 should be erected "on a site intermediate between the capitol and college hill." Their object was to use this building temporarily as quarters for the preparatory academy which they purposed to start going immediately, and later, to convert it into a demonstration school in connection with

[1] The area mentioned in all the early reports is 50 acres. In a summary of resources published in 1856, however, the area of the campus is estimated at 43 acres, and still later we find it consisting of a fraction over 40 acres.

the normal department which was one of their early dreams. But the legislature of 1849 doing nothing in this direction and the citizens of Madison having provided a building for the temporary use of the preparatory department, the project was abandoned in favor of a more ambitious design.

At the third meeting of the board in November, '49, the chancellor was made chairman of all its important committees, including a building committee. His associates on this committee were Simeon Mills and Nathaniel W. Dean of Madison. After a careful study of the site, an arrangement of grounds and buildings was devised which represented in the main the ideas of the chancellor and of J. F. Rague, architect, who received one hundred and sixty-five dollars for his estimates and drawings. The salient features of the plan were as follows: 1, "A main edifice" (the phraseology is characteristic) at the summit of the hill, "fronting towards the Capitol"; 2, "An avenue two hundred and forty feet wide, extending from the main edifice to the east line of the grounds and bordered by double rows of trees"; 3, "Four dormitory buildings, two on each side of the above-mentioned avenue, lower down the hill, on a line fronting toward the town"; 4, a carriageway "flanking each of the extreme dormitory buildings"; 5, professors' lots "between the north carriageway and the lake, and between the south carriageway and Mineral Point road." The compact little college herein provided for, with its dormitories for two hundred and fifty-six students and its comfortable rows of professors' houses fringing the campus on either hand, was destined to remain unrealized. The professors' lots have gone to other uses. Early prints of the university campus, with the anticipative pretentiousness of those days, continued

to picture four dormitories "on a line, fronting towards the town"; but only two were built. These and the "main edifice," often altered and at last sheathed in the great wings of University Hall, with the "avenue" or central lawn of the Upper Campus pitching eastward between its "double rows" of elms,[1] venerable now and broadbranched, are the chief vestiges of the original design.

On the afternoon of Chancellor Lathrop's inauguration, the regents reported to the legislature the plan of the building committee and represented the urgent need for dormitories if the university was to begin its proper work. Despairing, with good reason, of an appropriation, they asked and were granted a loan from the School Fund of $25,000 to be repaid, when sufficient lands should be sold, out of the income of the University Fund.[2] With the proceeds of the loan, one dormitory was erected and the foundations were laid for a second.

North Hall, begun during the summer of 1850, was finished in the autumn of 1851. Primarily a dormitory for students, the new building was arranged in two stacks, each warmed by a hot-air furnace. Many years later (1865), stoves were substituted and the students compelled to provide their own wood. On the fourth floor were the public rooms, six in number. The first three floors were occupied by twenty-four suites, each consisting of a study and one or two bedrooms, the whole estimated to accommodate about sixty-five students. Later, we hear of ninety students being sheltered in this building. It continued in use as a men's dormitory for upwards of thirty years. The Science Hall con-

[1] They were planted in 1851 and 1852. Of the seven hundred elms put out at that time one-third died during the next two seasons and were replaced, probably in 1854.

[2] It will be remembered that this paralleled the procedure of Michigan. See *ante*, p. 45.

flagration of 1884 compelled it to be converted to classroom uses and never since has the university been able to outstrip the demand for public rooms sufficiently to enter upon the provision of men's quarters. For four years, North Hall was the sole "university edifice."

Meantime the foundations of South Hall had yawned to the snows of three Wisconsin winters, "without a superstructure." Finally, after repeated appeals, a further loan of $15,000 was sanctioned by the legislature; but it was not until the autumn of 1855 that the building was ready for occupancy. The north half of the building was arranged into sixteen studies with bedrooms after the plan of North Hall. The north half of the south stack contained four "public rooms," thirty-six by twenty-three feet, to wit, a laboratory on the first floor, a cabinet of natural history on the second, then a "philosophical chamber," and, on the fourth floor, the embryo library. The south end of the building was fitted up for the members of the faculty and their families, and they immediately took possession. There was a large dining-room or "mess hall" on the first floor where students were received for board, on the club plan. This building had been designed as the home of the normal department and previous to the erection of Ladies Hall it actually became for a time the headquarters of the Female College.

The two dormitories were identical in dimensions and external appearance. They were four-story stone buildings, sternly rectangular, with a perfunctory arrangement of doors and windows, without pretense of relief or ornamentation, and with no remarkable beauty of proportions. Yet they were honestly built and have stood well. Their vine-clad walls embody as much of venerableness as the university possesses in physical

form. Like the "main edifice" a little later, and the buildings of the seventies, they were constructed out of the native limestone, the nobility of which as a building material was highly extolled by Bayard Taylor after his glimpse of Madison in 1855. The taste of later decades has sometimes patronized them, while committing expensive atrocities in other materials; but they have come into their own in recent years. On an ampler scale and with more geniality of design, but of similar materials, the buildings of the central campus will one day make an harmonious group of which these will be a part.

Six years had been consumed in securing the first two buildings, and Chancellor Lathrop's ten years' endeavors drew to an harassed end before the third came into use. Could the events of the next few years have been foreseen there is no doubt that the erection of the third building would have been postponed; but at the time it was projected, the institution, though in rough water, seemed to its friends to be escaping from the shallows in which it had been launched. The bulk of the landgrants had been disposed of and thus far the expansion of the little college had more than kept pace with the increase of its resources. By the autumn of 1853 all the college classes were represented, albeit by a few students only. "The Faculty is now full" announced the catalogue of 1855; it boasted six professors and a tutor. The following summer, normal and agricultural classes were run for the benefit of teachers in the public schools and were thought to portend departments devoted to these subjects; medical and law faculties were organized on paper. The aggregate of students in attendance rose from one hundred fifteen to one hundred sixty-nine in a single year. The time seemed ripe for the "main edifice." Again, the legislature was

importuned and granted (1857) a loan of $40,000, this time from the principal of the University Fund. Construction began the following summer and, after many financial difficulties, "Old Main Hall" was brought to completion in the summer of '59. The trio of which it was the last were all the buildings of the university down to 1870, a period of more than twenty years. It had gone in debt for them all and the day of reckoning was at hand. But, be this as it might, the end of the first decade found the university in possession of buildings that were to be adequate for some time to come. Had not the contracts for the central structure been let before the hard times of '57 could be foreseen, it is certain that no further building would have been done until after the war. In that event, it would have been necessary to vacate the dormitories for classes and it is unlikely that room would have been found for the "female" department which sprang up during the war. At the same time the income available for running expenses would have been annually about three thousand dollars larger. It is idle to speculate as to what the effect of these changes would have been, but it is clear that the history of the university during the next dozen years must have been vitally different from what it was.

University Hall has undergone more frequent and radical alterations than any other building on the campus; its ventilation proved to be bad and its interior arrangement turned out to be ill-suited to its objects. Some of the changes will be recorded in their place; to enumerate them would be to sketch in outline the progress of the university. Though changed by time and fate, the "main edifice" still holds its place on the brow of the hill, "fronting towards the Capitol," the eye of the campus,—and of the state.

IV

THE DAYS OF THE CHANCELLORS

THE history of university organization takes us back once more to the foundation of the state government. The constitution, ratified by the people of the state, had ordained a university, specified its location, laid down a general principle for the use of its federal lands, and excluded sectarian instruction. The legislature must embody these directions in suitable enactments and provide for their execution. The board of regents, to whom the last function was intrusted, must denote in greater detail the activities of the institution and create a faculty. The faculty, in turn, must create the actual life of the university by securing students and directing their energies in a proper manner. Nor would the circle of operations be complete until the university, finally, should commend itself to the approval of the voters of the state. Obviously, the administration of an institution so founded involved adjustments among a large number of very differently constituted bodies of men, and provided liberal opportunity for mistakes and failures in the distribution of powers and in the discharge of duties.

The legislature which met at Madison from June 5 to August 21, 1848, was an extremely busy one, having upon its hands the entire organization of the state. The fundamental statutes necessary to carry the constitution into effect, the codification of the territorial laws, the revision of court procedure, the establishment of

public institutions, the chartering of villages, the laying out of roads and other internal improvements, all craved attention in a pioneer state eager to attract more settlers. There was, also, much crowding forward of private interests and of sectional ambitions. A strong determination to keep the state free from debt and to hold taxes at the lowest possible point discouraged expenditures of every kind. It had been forcibly borne home upon the legislature, too, that the people of the state expected a short session. Notwithstanding all these adverse conditions the claims of education were not neglected. The common school system was naturally considered of prime importance; but the university received a reasonable amount of attention, both in committee and upon the floor of the houses. As finally approved by the governor, July 26th, the university act extended to sixteen clauses, several of which had been added as amendments in the course of debate; the law specified with considerable definiteness the scope and character of the projected institution.

The government of the university was vested in a board of regents, thirteen in number, of whom twelve were to be elected by the legislature, these to elect a chancellor who should be, *ex officio*, president of the board. The disposition of the legislature to keep the university under close surveillance was further manifested in provisions that the salaries of the chancellor, professors, and tutors, and the plans and estimates of buildings should be submitted to the legislature for approval or disapproval, and that an annual report of the board should be made directly to that body.

The question of the method by which the regents should be chosen was one of those which brought on keen debate. The obvious alternatives were appointment

by the governor and election by popular vote. The first method was in vogue in Michigan at the time and was that adopted by Wisconsin when the university was reorganized eighteen years later, though Michigan, meanwhile, had shifted to the method of popular elections. A Senate amendment which was adopted into the first organic act discarded both methods for election by joint session of the legislature. Pressure of business, however, prevented the first legislature from discharging the duty which it had imposed upon itself, though the two houses concurred in a resolution to meet for this purpose on the penultimate day of the session. The rush at the close of the session is well indicated by the fact that the houses convened for their last meeting at five o'clock in the morning to enable the members to catch the noon stages for home. On this final morning, a supplementary bill, empowering the governor to fill vacancies in the board of regents was introduced by Senator Mills of Madison and crowded to its passage. From Governor Dewey's second message we learn that he availed himself of this authority to fill the entire board. Through this unusual procedure it came about that the first regents of the university were appointed, like their successors since the reorganization of 1866, by the governor of the state.

The appointments were conscientiously made, without regard to party, from among the ablest men in the various sections of the state. At the head of the list in order of ability should be placed Edward V. Whiton, soon afterward elected chief justice of the state. He attended no meeting of the board, however, and soon resigned. His place was filled by the election of his fellow-townsman, A. Hyatt Smith, a lawyer and promoter at Janesville. The latter was relatively constant

in attendance and participated energetically in the proceedings of the board. Another distinguished appointee was Rufus King, editor, since 1845, of the Milwaukee *Sentinel,* which was a Whig paper, prominently hostile to Governor Dewey in politics. He was a West Point graduate and came of illustrious family. His father, Charles King, a prominent New York journalist, became, in 1849, president of Columbia; his grandfather was the famous New York statesman whose name he bore. General King was one of the most cultivated men who had joined fortunes with the young state. He attended the first meeting of the board and the important series of meetings held in January, 1850, at the time of Chancellor Lathrop's inauguration. We owe to his pen our best account of that occasion.

The southwestern portion of the state was represented by John H. Rountree of Platteville and Cyrus Woodman of Mineral Point. The latter, a native of Maine and a graduate of Bowdoin College, was not without intellectual interests.[1] He appears, however, to have been engrossed with private affairs while in Wisconsin and attended only one meeting of the board. He was a law partner of C. C. Washburn whose signal services to the university belong to a later epoch. A pioneer merchant and banker, Woodman soon amassed a competence, and returned to the East to enjoy it. "Major" Rountree, a pioneer of an earlier type, was a Kentuckian whose parents had emigrated from Virginia, who had, in turn, while still a youth, departed from Illinois and had then entered Wisconsin as early as 1827. He was the "grand old man" of the lead region, a veteran of the Black Hawk War, and had been constantly in public service

[1] See below, p. 213, for the gift of the Cyrus Woodman Astronomical Library.

during territorial days. Elected treasurer of the board at its first meeting, he resigned at the second "on account of the distance of his residence from Madison." Outside the Madison members, however, none of the early board were more constant in attendance. Others who, during the first years, frequently helped the Madison members to make out a quorum were Hiram Barber of Dodge County and John Bannister of Fond du Lac. Both were influential business men of their respective regions and had held public office. Both, moreover, were among those who drew six year terms at the first meeting of the board, so that they were in the service of the university throughout the period of organization. Barber, like Whiton, King, Rountree, and Root, had served in the Constitutional Convention; he had been one of Dewey's rivals for the democratic nomination for governor. Bannister was the Free Soil nominee for lieutenant governor in 1849.

Four of the appointees were residents of Madison. Alexander L. Collins was a lawyer, a native of New York, who had emigrated to Ohio in 1833 and to Wisconsin in 1842. Like many self-made men of that day, he had taught school for a time. In Wisconsin he soon became prominent on the Whig side. He ran against Governor Dewey in 1849, was twice the Whig candidate for the United States senate, and rose, in later years, to a high place in the judiciary. He was the first chairman of the executive committee of the board of regents. Thomas W. Sutherland was another Madison lawyer, one of the earliest settlers in the village, first president of the village corporation and for many years United States district attorney. During the initial steps toward the organization of the university, he served on the most important committees and was elected treas-

urer upon the resignation of Major Rountree in January, 1849. The following spring he took the overland route to California and never returned to the state. His place on the board of regents was filled by Nathaniel W. Dean, a Madison merchant, and Simeon Mills was elected treasurer in his stead.[1]

Simeon Mills was one of the strenuous pioneers with whom migration was well-nigh an inheritance of the blood; in whom native boldness and acumen supplied the place, not only of initial capital, but of early education. Carried, as a child, from Connecticut to northeastern Ohio, he barely waited for manhood before striking out alone toward the frontier, reached Wisconsin the autumn it became a territory and, the following spring, stepped from an Indian canoe upon the site of Madison within a few hours of the gang of men who had come to erect in the forest the capital of the state. From the position of clerk in a forest grocery and carrier of the post on forest trails he rose rapidly to be one of the chief promoters of the town and to fill responsible places in the public service. He was in charge of the territorial treasury when Wisconsin was admitted to the Union and, as the Madison representative in the first State Senate, was active in pushing university legislation. Besides serving for seven years as treasurer of the board of regents, he was a member of the first executive committee, and acted as the board's agent in financing, platting, and selling off the "university addition" to the village. Madison's fourth representative on the board was Julius T. Clark, editor of the *Express*, a Whig paper. He was the first secretary of the board. The record of its proceedings

[1] On the university roster Mills stands as first treasurer of the university, though, in reality, as appears above, he was the third. He was, however, the first that handled any funds.

in his clear hand are more legible at this day than most of the printed documents contemporary with them. His term as regent expired in two years; but he served as a paid secretary until 1856, drawing all the warrants of the board. He also filled, for a time, the nominal office of librarian, but was soon succeeded by Horace A. Tenney,[1] and he by Professor Sterling.

There remains for final mention[2] the sole member of the board who could lay claim to special expertness in educational matters. Eleazer Root has been described, by a contemporary, as "a gentleman of distinguished abilities, highly educated, dignified in address, of earnest and honest purpose, to whom the educational field was in his early life, of all others the one most attractive." He was, with the exception of Major Rountree, the most venerable member of the board, forty-six years of age. After graduating from Williams College in 1821, he had studied for the bar and had practiced half a dozen years in his native state of New York. He had then passed about fifteen years in Virginia. It will be remembered that these were the years when Virginia was making vigorous advances in collegiate education. Whether the coincidence is significant, it is difficult to know. At any rate, it was in Virginia that Root became interested in educational pursuits. Coming to Prairieville (Wau-

[1] H. A. Tenney was another Madison journalist. Though not until several years after a member of the board of regents, he was one of the university's earliest benefactors and warmest defenders. Authorized by the board, at its first meeting, to begin the formation of a university "cabinet" or museum, he gave gratuitous service in this direction for a number of years, and enlisted the aid of numerous collectors, of whom the most important was Increase A. Lapham, a young civil engineer of Milwaukee, afterward associated with the geological survey of the state.

[2] Concerning Henry Bryan, who attended only the first meeting of the board, I have been unable to secure any information.

kesha) in 1845, he immediately secured a college charter for Prairieville Academy and, the following year, opened Carroll College, with himself and John W. Sterling as professors. He was the most influential member of the Second Constitutional Convention in matters pertaining to education, and "the author, substantially, of the education article in the state constitution, as well as of that providing for the founding and organization of the state university." The choice of both parties for state superintendent of public instruction, he discharged the duties of that post during the first four years of statehood. It is worthy of record that he presided over the meeting in January, 1849, at which the State Historical Association was organized. The first act of the board of regents was to elect him president *pro tem.;* he largely directed the proceedings of the board until the arrival of the chancellor and formulated its earliest reports to the legislature. As chairman of a preliminary committee, he probably drew the series of resolutions in blank upon which the first steps of the university were based. It was upon his motion that the name of his colleague, John W. Sterling, was inserted in the resolution providing for the appointment of a university professor who should be temporarily in charge of a preparatory department. He was himself appointed, in the terms of another of these resolutions, "an agent to procure information in regard to the manner in which the university should be organized, and to report drafts of practical plans for university buildings; and authorized,—if he shall deem it necessary, to visit the University of Michigan at the expense of the Board." By reason of his official position, he was virtually a resident member and could be relied upon for attendance at meetings. His name begins the notable list of Williams College men who

have been conspicuous in the service of the University of Wisconsin.[1]

The first board of regents, then, was carefully chosen from among the best men in the state, yet few of them had any special acquaintance with the problems of education; few enjoyed a collegiate training and not all of these were able, or saw fit, to render actual service. The first call brought together ten of the twelve members of the board, and the second, eight; at the third meeting President Root and Chancellor Lathrop addressed one another in rounded Websterian periods, surrendering and accepting the chair, in the presence of six other gentlemen. The inauguration of the chancellor in January, 1850, was a gallant occasion to which the legislature surrendered the day and the house. There was a procession of citizens, students, and state functionaries, led by a band of music, to the capitol. Addresses were delivered by Regent Smith and the chancellor. In the evening there was a ball graced by a "Kentucky" belle and attended by "fifty-two couples," including the chancellor and "his lady." The interest in this function, combined with certain other attractions, filled the little town to overflowing. Among the visitors were most of the regents, so that, at a series of important meetings running over three days, all of the board were present except Bryan and Woodman.

Thereafter, interest languished. Counting the chancellor and the state superintendent there were six residents of Madison, on the board; but, during the next few years, it became difficult to secure the attendance of the one out-of-town member necessary to fill up a

[1] The latter half of his life was spent in the Episcopal ministry in Florida, whither he had gone in search of health and where he died, at an advanced age, in 1887.

quorum.[1] Considering the conditions of travel this is not remarkable. For most of the non-resident members, a visit to Madison entailed from one to two days each way of hard staging over barbarous roads. Arrived in Madison, the traveler might find but cold comfort at the overcrowded hostelries. General King, in reporting to his paper the events associated with the chancellor's inauguration, noticed significantly his own singular good fortune, in having secured entertainment at the house of a friend. The regents met, this time, in the library room at the Capitol; but, on future occasions, they sometimes convened at the house of a local member for lack of a public meeting place. All of these disadvantages were at their worst at the time of the annual meetings in January, when the legislature was in session. Thus, university affairs soon gravitated into the hands of the chancellor and the local members of the board, and this fact, no doubt, accounts in some degree for the jealous attitude of the legislature and for a feeling of hostility which was soon engendered in the state toward what many regarded as a merely local institution. Nor is it altogether unlikely that local patriotism, if not personal interest, may have contributed in a measure to the somewhat precipitant zeal with which the university was launched.

The first legislature not only failed to elect a board of regents; it refused to provide funds for the immediate organization of the university. It had, however, arranged for the valuation of the university lands by

[1] During the remainder of the first five years, attendance was as follows: July 25, 1850, present 7; November 20, 1851, no quorum; December 17, present 7; January 17, 1851, no quorum; January 18, present 7; January 20, same; December 24, present 7; December 25, same; January 21, 1852, no quorum; January 22, no quorum; August 3, present 7; January 19, 1853, no quorum; September 8, present 7.

electing in joint session three appraisers for each county of the state. By the time the legislature again came together, appraisals had been returned on a good portion of the lands and, before the end of another year, sixty-three sections and a fraction had been appraised at an average of two dollars and eighty-seven cents an acre.[1] By an act of 1849, the secretary of state, the state treasurer, and the attorney general were constituted a board of commissioners to direct the sale of school and university lands and to invest and manage the funds. The appraised value was established as a minimum and the commissioners were instructed to offer the lands for sale at auction, commencing December 15, 1850.

Many of the appraisals must have been thoroughly dishonest. The average price per acre set upon the "*selected* university lands" was over sixty cents lower than that set upon "*ordinary* school lands." Yet the university lands had been early and competently chosen from the best in the state, while the school lands were the chance sixteenth sections of the townships. These facts, laid before the legislature by the regents, were reiterated in the governor's message and in a decisive report from a legislative committee on the university and university lands, and, falling in with the enthusiasm which attended the chancellor's inauguration, produced so strong an impression upon the legislature of 1850 that a new act was passed, setting the minimum price at ten dollars an acre, and ordering immediate sales under this limitation.[2] In the course of the year, a

[1] On account of a misprint (R.R. 1850) this has previously been given as $2.78.

[2] At their meeting in November, 1849, the regents had resolved to petition the legislature "to give to the board of regents the power to determine the time of sale of the university lands, and the power to establish the price at which such lands shall be sold." The request was ignored.

thousand and fifty-nine acres were disposed of at a little more than the minimum price. The future bloomed; the chancellor in his next report estimated the endowment of the university at $450,000 and was moved to congratulate the state upon saving its university endowment from the disasters which had befallen similar funds in communities less favored by divine providence. He was doomed to a speedy disillusion. By the next meeting of the legislature a formidable resistance had developed among pre-emptors and speculators. The governor was induced to urge the protection of pre-emptors already in possession of university lands by enabling them to buy, "say forty acres," at the appraised values of 1849. But the legislature went farther and on the fourth of March the assembly, "notwithstanding the efforts of the university interests," concurred in a senate bill which set the minimum price at four dollars an acre. Governor Dewey vetoed the bill and it was succeeded by another, which became a law, setting the price at seven dollars, and instructing the commissioners to remit any excess over this amount paid by former purchasers.

This reduction of price was not altogether unwelcome to the university officers since it promised a more rapid sale of the lands. But the end was not yet. The next governor, L. J. Farwell (1852 and 1853), though apparently conscientious, espoused a policy which proved favorable to private interests. His first message opposed the withholding of the university lands from sale as inimical to the material progress of the state. The legislature took the cue and voted a re-appraisal of the lands, establishing three dollars an acre as the minimum price at which appraisals might be made. As a further

inducement to buyers the requirement of purchase money was abolished. The new appraisers virtually adopted the three dollars imposed by law as a maximum with the result that a good share of the lands were sold at about this price. But, not only was the price reduced,—the fund was mulcted for a new appraisal charge and the security of sales was greatly impaired. The act of 1849 for the sale of school and university lands had restricted bids from any one person to one hundred and sixty acres for the purpose of confining purchases to actual settlers; but this feature was likewise rescinded and it was not until 1855, after great scandal and damage, that a new limitation (to three hundred and twenty acres) was imposed.[1]

The high minimum prices of 1850 and 1851 protected the university lands temporarily from the greed of speculators, but the reduction of the price and the abolition of forfeit money enabled buyers to enter large quantities of lands which they could inspect at their leisure, turning back upon the commissioners those lands

[1] The most notorious abuse was in connection with the school lands. It was shown at the time, and admitted by the commissioners, that in 1855, the school lands had been withdrawn from registration for three months, to permit the agents of one Ludington of Boston to make selections of the choice lands. There were thus withdraw 165,000 acres of which Ludington secured 70,000. A joint investigating committee of the legislature, in 1856, reported "gross irregularity and perhaps fraud in the management of school lands on the part of the commissioners, Geo. B. Smith and Alexander T. Gray." It was the pot calling the kettle black, however. With a few shining exceptions this entire legislature had been bought up by the La Crosse and Milwaukee Railroad, Byron Kilbourn, president. In disposing of the land grant for the encouragement of railroads, each legislator had received for his vote "a liberal douceur or gratuity," as it was delicately denominated by Byron Kilbourn, the president of the company and chief manager of these "reciprocal acts of favor." The chief point at issue in the investigation of this affair was, whether the "pecuniary compliments" were conferred or rather promised, before or after the voting of the grant.

which proved undesirable as investments. In a very short time, the holdings of the university consisted mostly of rejected lands of relatively little value, and in the end, the entire grant netted but a third of the chancellor's first estimate. As if this were not enough, the fund was still further mulcted for clerk hire and suffered diminution through bad investment. It was originally intended that the expenses of the school and swamp land bureau should be sustained from the fees charged to the purchasers of lands. But under Governor Barstow's administration (1854 and 1855), the state officers adopted the practice of drawing money from the treasury for the payment of clerks and pocketing the fees. An investigation of the state departments in 1856 showed that $35,385.75 in office fees had been "converted to the private use of the commissioners," "an enormous tax for the benefit of two or three people . . . already paid for their time out of the treasury," while there had been charged off against the lands $22,758.58 in clerk hire, besides other expenses for appraising, advertising, blanks, etc." The loss of the university in charges of this character was more than $10,000. The sum that was lost through bad loans in small amounts of $500 to private individuals throughout the state was said by an investigating committee of regents (1860) to amount to only $600, nor was the charge fully proved that these losses occurred chiefly among private friends and political adherents of the state officers. Even according to the standard of those easy-going days, however, "gross offenses had been committed." The university fund had been intrusted to the management of the state departments so that it might be spared any administrative expense; instead it had been exposed to the inroads of the "Forty Thieves"

of contemporary parlance; many precious dollars, that might have helped to launch the university on its way, floated instead the champagne suppers of "Barstow and the balance."

Meanwhile, without waiting for funds, the regents had proceeded to purchase a site and set the university in operation. Loans "effected on the private responsibility of the board of regents to the amount of $260" were applied to the first payment on the Vanderpool purchase and to fitting up a room for the preparatory department. Up to January 15, 1850, the only funds received had been the "fees in the primary department which have mostly been collected by Professor J. W. Sterling and should undoubtedly be applied in payment of his salary."[1] At this time another private loan of $500 was effected and, shortly after, the loan of $25,000 granted by the legislature of 1850 became available and was drawn upon for current expenses as well as for the building operations of this and the following year. Besides this loan, the chief resource during the first few years was the profit on lots in the university subdivision. By November 20, 1850, the site had been paid for at a total cash outlay of $3,833.33, while $236 had been collected upon lots sold. During the next twelve-month over five thousand dollars in cash was received from this source and, within a couple of years more, the lots had been practically closed out at a net gain to the university of about ten thousand dollars. A portion of the lots had been traded off for village lots that were required to fill out the site. Four lots "on the western extremity" were "contracted, nominally for the sum of fifty dollars, but really in the consideration of the erection of a brick boarding house sufficiently large to accommodate fifty

[1] MSS. Minutes of the Board of Regents.

students with board, to be erected on said lots." In 1852, four hundred and sixteen maple and elm trees, "planted out upon the university grounds" were accepted as payment for four lots. A number of university officers bought lots, one of the largest investors being the chancellor himself, who apparently accepted a portion of his salary in this form. Had the regents been able to hold this plat off the market for a few years instead of selling it out to meet current expenses, a considerable fund would have accrued to the university. As it was, the land had changed hands within two or three years and the money had been spent.

Thus far, the most formidable item of current expense had been the chancellor's salary of $2,000 a year, "a medium of the salaries paid to the presidents in our best American colleges." The salary outlay, up to the time of the first report, had amounted to $2,841.66, plans and ground improvements, $379.25, printing and advertising, $533.50, cabinet and books, $409.22. There had already appeared on the list an ominous interest charge of $1,577.62. As further offsets to these expenditures there were the tuition fees of students, which had amounted, during the first year, to $364, and the first payment on the university land fund, three hundred dollars.

The next year (1851) there seems to have been no payment on account of the land fund income. There remained of the state loan about $2,500. This, with student fees and the five thousand dollars derived from the sale of lots, supplied instant needs and the regents faced the fiscal year of 1852 with a balance in the treasury of ninety-three cents. They received during the next twelve-month $650 from the income fund, and, upon sale of lots, close to three thousand dollars. The dormi-

tory being now occupied, student tuition and rent amounted to $948.96, but the total sum from all these sources of income was only $4,503.34 while the expenditures for the year came to $8,480.27. This puzzling financial problem was solved in the most approved manner. The treasurer's account was adorned with a handsome credit of $4,980 and the regents had engaged to pay annually, to a gentleman in New York, eight per cent. of five thousand dollars. The date for the repayment of the last-named amount was sufficiently distant to render it of purely academic interest.

With matters at this pass, it is difficult to see how the university could have survived another year had not the sweeping reduction at this moment of the price of university lands greatly accelerated their sale. It is possible that the embarrassments of the moment enfeebled, in some measure, the resistance of the university authorities to the action of the legislature in 1852. Certain it is that the chancellor's next report refers with cheerful satisfaction to the augmented resources of the university which have resulted from the recent act. Up to October, 1852, the total proceeds of sales amounted to only $26,000, the income from which would have been insufficient to meet the annual interest which the regents were engaged to pay. By the end of another year, with the new price in effect, the sales aggregated $106,000, of which all but $10,000 was already producing an income. Thus, in the fifth year of its operation, the university received from its land fund something over three thousand dollars. Tuition, sale of lots, and the remains of its New York loan brought its total income for the year to $6,645.58 and it entered upon its second lustrum with a credit balance of $281.15. The next year the university received $6,800 from this source and in 1855, $12,404.15,

which included, however, a balance from the preceding year and exceeded the annual income of the fund.

The first grant of lands had now been largely disposed of and had produced, so far, a fund of about $161,000. In the meantime, the grant had been duplicated. The state, on entering the Union, had received from the national government a gift of "twelve salt springs, with six sections of land adjoining to each." As there were no lands of this character in Wisconsin, the legislature of 1851 had petitioned congress for the privilege of selecting from any government lands remaining within the state "the same quantity for the use of the State University." The petition was allowed in an act approved December 15, 1854. In anticipation of favorable action, most of the seventy-two sections had been located and the entire grant was soon ready for market. The board of regents at once appointed a committee to consider "the policy of the institution relative to the disposal of the new land endowment"; but nothing effective was accomplished. The chancellor in a disheartened tone referred to his "observation of the chances to which university lands are exposed" and doubted whether the university might not be a loser by aiming at a larger amount than the minimum already set by law. He was even tempted by the thought of the dispatch and security which would attend a sale at two dollars and a half. The chief danger to be avoided was that of dishonest pre-emption before the lands were offered for sale, an abuse at which the state officers,—one of whom was at this moment a member of the board of regents—were suspected of conniving. The only safeguard thrown round the new grant, however, was the law of 1855, already referred to, which limited bids from one person to three hundred and twenty acres.

The lands were soon taken at the low minimum price set by the 1852 act and the income fund was increased by the pitiful sum of $138,240.

In 1854, as we have seen, the legislature permitted the regents to increase their indebtedness to the school fund through a further loan of $15,000, in order that the second dormitory might be brought to completion. In asking for this loan the chancellor and regents expressed their determination, as soon as this building should have been finished, to establish a sinking fund and to project no further buildings until these should have been paid for. The defensive tone adopted here, as well as in the optimistic review of the university's assets included in this report, indicates that the regents were already apprehensive of criticism for their management of the university finances. The legislature of 1854, from a mixture of motives no doubt, tightened their grip on the university finances, ordering that hereafter no money should be "drawn from the treasury by the board of regents, except in pursuance of an express appropriation by law."

With the accumulation of the income fund, however, the virtuous resolution of 1854 relaxed, and the regents applied to the legislature of 1857 for a loan of $40,000 for the construction of the third building. But the whole country was soon in the grip of hard times and the state treasury was bare. The regents resorted again to borrowing from private sources, paying the heavy toll of ten per cent. interest for temporary loans with which to carry on their project. The amount of the state loan was eventually made up compositely from the school, general, and university funds, and the cost of the building ran to about $60,000. With the main edifice completed, the university found itself, at the end of the first decade, in a financial situation which few could

regard with complacency. The productive fund of the university was estimated in September, 1858, at $316,365.83, but two years later this had shrunk, through forfeitures, to $286,725.92. There had been expended on buildings and grounds $101,000, of which some $6,000 had been expended out of income, while the outstanding loans amounted to $95,146.81, the New York loan of $5,000 remaining still unpaid. Of a gross annual income amounting to about $21,000, over one-third, or $7,239.70 must be paid out every year as interest, while nearly a thousand dollars was annually charged off for clerk hire, leaving a net income of only ten or twelve thousand dollars. The university found itself, it is true, in possession of a campus and buildings which made an excellent showing in a statement of assets, but with an income absurdly inadequate to the support of an institution of learning,—the shell of such an institution but no adequate means of sustaining life within it.

At first glance, this situation appears to confirm the claim of hostile critics that the officers of the university had grossly mismanaged its business affairs. But before agreeing with this censure one should be mindful of the serious difficulties with which they had to contend. In the first place it should be remembered that at no time had the board of regents more than an indirect influence over the sale of the university lands or the management of the fund; nor had they an opportunity to outline a policy for the use of the income which should be free from interference on the part of the legislature and the state officers. The legislature of 1849 had intrusted the sale of the lands and the management of the fund to a committee of the state officers as an addition to their regular duties; that of 1854 added to the helplessness of the board by requiring the income to be voted as an

annual appropriation. The board of regents, with the chairman of the faculty for its executive, had, therefore, to appear annually before the legislature to sue for the use of the income on its own fund, the entire management of which was in the hands of still another group of officers with whom it was a secondary business, who had no necessary interest in the welfare of the university, and over whose conduct, it proved, the legislature itself exercised but faint control. With but a tenuous hold upon the resources of the institution, the regents had constantly to reckon with the deadly perils which environed public funds and public grants of land. The early regents were men of proved sagacity, many of them intimately acquainted with public life; if they appear to have launched the university with short-sighted precipitancy, it is well to remember that they knew their contemporaries and the hazards of contemporary politics better than we. We know enough to realize that delays might have proved disastrous to the whole enterprise. They could not, of course, forecast either the panic of 1857 or the Civil War. Doubtless the feeling of posterity ought to be, not one of carping discontent that more was not accomplished, but one of admiration and gratitude that, in the face of dismaying obstacles, a start was made.[1]

[1] Curiously, discussions of the land grants seem to have ignored almost entirely the fluctuations which occurred in land values in the course of the various transactions under consideration. The effect of the panic of 1837 in checking the Michigan sales, and the effect of the competition of government lands in particular states upon the sale of educational grants within the same state have been frequently noted; but the broad change in the value of unimproved lands has not been brought to bear We have seen (*ante*, p. 4) how immigration abandoned Michigan for Wisconsin in the decade 1840-50. After about 1840, the opening of unlimited areas of public land and the new facilities for settlement which made them available with ever-increasing rapidity, produced a gradual depression in land values which invalidates all unmodi-

The original charter of the university provided for the erection of four departments: "(1) The Department of Science, Literature, and the Liberal Arts; (2) The Department of Law; (3) The Department of Medicine; (4) The Department of the Theory and Practice of Elementary Instruction." "To this, I am satisfied," wrote the chancellor, in an early communication to the board of regents, " we must add a fifth, namely, a school of the application of Science to Agriculture and the useful

fied comparisons such as, for example, that so often made between Michigan and Wisconsin It was a long time before the increase in colonization overcame the tendency of these causes to depress the value of unimproved lands It would appear, therefore, that Michigan was peculiarly fortunate in the time when her lands were first placed upon the market. Michigan did not realize more from her university lands than other states merely because she held them for a rise in value; in fact, her earliest sales were her highest. She realized more because she sold on a higher market and, a part of the time, at fictitious prices through receiving payment in depreciated scrip. In 1837 Michigan sold several thousand acres of university lands at $22.85 an acre. A dozen years later, when Wisconsin was at about the same stage of development, no friend of the university dreamed of realizing more than $10.00 an acre for equally good lands. Without questioning, on the whole, Michigan's superior management of her land grants, it is allowable to say that comparisons are shallow which do not take these qualifications into account.

Before closing a discussion, at once too long for the place and too brief for the subject, it may be permissible to touch one related point which bears upon the fallacy, partial at least, of the charges of folly so often urged against the early sales of the trust lands. Dividing the census estimates of the total cash value of farm lands, improved and unimproved, in Michigan and Wisconsin respectively, for the years 1850, 1860, and 1870, by the total number of acres reported, we arrive at the following estimates of the average cash value of farm lands per acre at the ten-year intervals:

1850	Michigan $12.00;	Wisconsin $ 9 00
1860	Michigan $23 00;	Wisconsin $16 00
1870	Michigan $39.50;	Wisconsin $25 50

It may be seen that, on the average, in either Michigan or Wisconsin, the price of an acre of land funded for ten years at seven per cent., the lowest ruling rate of interest at that time, would have yielded almost exactly the cash value of the land at the end of that period. It was held in the Wisconsin legislature in 1849, when the question of selling or holding the university

arts." His idea of the relation of parts in such an institution is clearly set forth in his report of 1853. "The entire conception of an American university would be realized," he thinks, in "(A) a central institution of general and liberal education, surrounded by (B) professional schools of 1, Theology, 2, Medicine and 3, Law," to which he "would add 4, The Normal School, and 5, The School of Science as applied to Agriculture and the Arts." Theology he eliminates, since, "for reasons satisfactory to the community" the state will not undertake instruction in this branch. He would persuade the various denominational colleges to specialize in this subject, relinquishing to the university more and more the education of their candidates in other fields of knowledge.

Of the comprehensive plan unfolded in the charter only a small part was destined to be realized for a long time to come; except for a few unfruitful tentatives the resources of the university after the erection of buildings were barely sufficient for the support of what Chancellor Lathrop here calls "the central institution of general and liberal education." It was the policy of the chancellor and regents so to proceed that the provision of the material plant, the building up of a teaching staff, and the increase and scholastic progress of the student clientele should all keep pace with each other and with

lands was under consideration, that the increment in value of the lands would not exceed the use of the money at seven per cent. The event seems to have validated this argument. Abstractly, then, assuming that a fund was to be created and assuming that sales were honestly made, it was indifferent whether the lands should be held for a period of years and then sold, or sold at once and the proceeds funded for an equal length of time. Was it the duty of the fathers of the state, by either method, to delay the founding of a university for ten, or twenty, or even thirty years, in order to confer upon posterity the benefit of such a fund? They chose to confer upon the next generation, educated men rather than an incremented educational fund. The men were few and their education was expensive. Who will, may judge whether they cost too much.

the avails of the university fund. They regarded it as axiomatic that the first claim upon the fund belonged to the central college, which they modeled upon "the best classical colleges in the country." As we have seen, their first step in this direction had been to set going the preparatory department under the direction of Professor Sterling, who, as soon as the college should be in operation, was to hold the chair of Mathematics and Natural Philosophy. During the first three terms, except for some assistance from the chancellor, Professor Sterling gave all the instruction to the preparatory classes. When, in 1850, a small class had been prepared to begin the work of freshman year, a tutor was added to the faculty. The first tutor, Obadiah M. Conover, was advanced two years later to the professorship of Ancient Languages and Literatures and the tutorship was filled by the appointment of Stephen H. Carpenter. The chancellor "rendered daily instruction in the classical department." It was not until the spring of 1854 that a professor of Chemistry and Natural History was elected in order that scientific instruction might be supplied to the first graduating class. Professor S. P. Lathrop of Beloit was assigned to this post and gave the first instruction in Chemistry with the help of apparatus borrowed from Beloit College. The following autumn John P. Fuchs, M. D., was engaged to give instruction in Modern Languages, entering upon the professorship a year later. Meantime the chair of Mental Philosophy, Logic, English Literature, and Rhetoric had been filled by the unanimous election of Professor Daniel Read, and, after some delay, occasioned by a movement in the board of regents to suspend operations for a time, Ezra S. Carr, M. D., had been elected to succeed Professor Lathrop, who died in the first year of his incumbency.

The remaining chair of Ethics, Civil Polity, and Political Economy was an appanage of the chancellorship; so that, at the opening of the year 1855-56, the college faculty was complete.

Professor Sterling's salary during the first few years had been only five hundred dollars; when Professor Conover was elected, the salaries of both were fixed at six hundred dollars and, early in 1854, the regents voted that these should increase one hundred dollars per annum, until they should reach one thousand dollars. Professor Read, however, was elected at a salary of one thousand dollars and the others were promptly raised to the same scale. The chancellor's salary was two thousand, and the salary of the tutor five hundred dollars, a year. Small as was this salary budget, a glance will show that little margin was left for further expansion of the institution within the resources provided by its land fund.

We come now to one of the most difficult as well as one of the most interesting phases of university history. By the time the organization of the central college had been completed there had arisen in the state lively dissatisfaction with the manner in which the university had been developed. Although much of the hostile criticism was interested and disingenuous, and much of it was ignorant or misinformed, the officers of the institution could not but be aware that there was a demand among the people of the state for something different from the classical college that had been created. What was demanded was "a real university" and more "practical" instruction. That the state itself had by mismanagement so crippled the university fund as to make such a development impossible is a fair pleading in historical equity, but it did not relieve the temporal difficulties of

the chancellor and regents. Having virtually no funds with which to proceed, they organized the remaining departments on paper and, where this was possible, began operations in a small and tentative way, hoping by such means to appease popular sentiment and place the departments in line for assistance from other sources than the regular income of the university.

An ordinance for the establisment of a Department of Medicine with seven chairs of instruction was passed by the board of regents in February, 1855. Its "emoluments" were to be derived from the fees of tuition until the university should be free from debt and "in the enjoyment of a clear annual income of at least $12,000." The faculty was appointed and given a page in the catalogue of 1856. In 1857, the sum of six hundred dollars was appropriated to the department "for specific objects" and the sum of five hundred dollars was expended by the dean of the faculty of Medicine in a manner that was never satisfactorily explained to the board. The Department of Law was ordained in 1857, with two professorships, but did not get beyond the naming of the faculty and an appearance in the catalogue. The departments of Normal Instruction and of Agricultural Instruction were organized early in 1856 by the appointment to these separate chairs of Professors Read and Carr with an additional salary in each case of five hundred dollars. The same year a course leading to the degree of Bachelor of Philosophy was established for the benefit of students who wished to dispense with the ancient languages and to give greater attention to scientific and practical subjects. The degree was first conferred in 1858. Two new departments of theoretic and practical Engineering, and of Physics and Astron-

omy were created in 1857, but there were no funds to warrant appointments.

Of these early tentatives the one of most immediate importance was that in the direction of normal instruction. The incorporation in the charter of a department of the Theory and Practice of Elementary Instruction had been an addition to the scheme of university organization which had been, otherwise, copied from that of Michigan, and novelty was claimed for it by the regents. It was quite certain that the popular interest in this branch of education on account of its practical relation to the common schools would lead, in time, to some form of state support, and the chancellor and regents were anxious to turn this to the advantage of the university. In their first request for a building to house the preparatory department, the regents had announced their intention of converting it, eventually, into a model school for the Normal Department,—a project which was to remain unrealized for nearly three quarters of a century. Again, when the loan for the completion of South Hall was asked of the legislature, this building was said to be intended, ultimately, for the use of the same department. The chancellor's first report (1850) contained some acute remarks in regard to the advantages of connecting this branch of popular education with the university. "The Normal School system of the eastern states," he observed, was "open to the objection of fostering and perpetuating those distinctive characteristics of the teacher which have hitherto impaired his influence." The university on the other hand is primarily a seat of learning, yet "makes the teacher of the district school the dispenser of its bounty. Its pulsations send the tide of intellectual life to the remotest extremities of the social body." The last sentence is not a bad

example of the eloquence of generalization with which the chancellor frequently mitigated the absence of actualities, and which did not escape the derision of hostile critics. Beyond the annual reiteration of hopes and promises, nothing was accomplished until 1856. Then Professor Read, who seems to have been appalled at nothing, had the title Professor of Normal Instruction added to the array of subjects with which his name was connected, and a course of lectures on the art of teaching was announced for the summer term. Candidates for the course were advised to be on hand at the beginning of the term in order that the lectures might be preceded by an elementary review. Eighteen teachers attended and the course was repeated the following summer to a class of twenty-eight; the attendance in 1858 seems to be unrecorded.

About the same time, the first steps toward the encouragement of normal instruction were being taken by the state government. It had been ordered by the state constitution that the portion of the school fund remaining after the common schools had been provided for, should be "appropriated to the support and maintenance of academies and normal schools and suitable libraries and apparatus therefor." But the school lands had suffered the same fate as the university endowment, so that no such surplus was available. To make up this deficiency, the legislature, in 1857, appropriated "twenty-five per cent. of the gross proceeds arising from the sale of swamp and overflowed lands" and passed "An Act for the encouragement of Academies and Normal Schools" wherein it was provided that any college or academy of the state, "of clear capital of $50,000" which engaged in normal instruction, might receive aid from the state up to $5,000 a year. A bonus of twenty

dollars was offered "for every female graduate." The board of regents of normal schools met for organization, at Madison, in July, 1857, but resolved that, "however desirable separate Normal Schools," the act did not empower them to take any steps other than to receive proposals. The state university had been specifically excluded from the benefits of the act, and the next important step which was taken, brought Lathrop's administration to an end.

"It has fallen to the lot of no public institution of learning with which I have been associated in the course of a long professional life to encounter the same amount of misapprehension, jealousy, and misrepresentation, as have lain in the way of our beginnings here," Chancellor Lathrop wrote to the Milwaukee *Sentinel* in 1856. To separate the just from the unjust criticism and to disentangle the personal, political, sectional, and sectarian animosities which entered into this extraordinary attitude toward the university in the middle fifties is now well-nigh impossible. That it was the most disreputable period of Wisconsin political life was doubtless of significance. Under such conditions, the rivals of the university might well believe that "a public institution could not succeed." At the same time, they were ready to take advantage of the very conditions they deplored to annihilate the institution and divide the spoils. The chancellor had early called attention to the "distrust of state universities" which was "fostered by the rivalry of denominational colleges." His suggestion, quoted above, that the denominational colleges should specialize in theology, had a fine, unintentional irony that must have rankled with some, nor was it entirely blunted by his plea that there be "no unworthy rivalry in the great cause of education." In Michigan, it will

be recalled, sectarian opposition was propitiated, at the outset, by distributing the professorships among the clergy of the various denominations. No concessions of this kind were made in Wisconsin, though there was "a perpetual pressure for place in the university" and "about every sectarian denomination had lain down on it for a professorship." The placing of the second land grant on the market was a signal that the state was about to "cut another melon" and, since some natural, if not justifiable, criticism of the business management and educational achievements of the university was beginning to be circulated, hope and cupidity joined hands.

Accordingly, in the spring of 1855, petitions were presented to the legislature asking that the university be discontinued and its fund distributed among the colleges already established in the state; a bill to repeal the university charter and so dispose of the income was introduced into the legislature, but was withdrawn before coming to a vote. There is good reason to suppose that there was treachery at this time within the board of regents itself. Contemporary allusions bear out the conjecture that an effort of a group of the regents, in the early part of the year, to bring about a suspension of the university, pending a reorganization, was maliciously motived. The movement was headed by Alexander T. Gray, secretary of state, who shortly after gained unenviable notoriety in connection with the land transactions of this year. At a show of strength, on the issue of filling the chair of Chemistry, this party was defeated by a vote of five to four.

One of the most unguarded attacks on the university was that by Senator Charles Clement of Racine, on the floor of the state senate, March 27, 1856. Senator

Clement compared the university with Racine College to the disparagement of the former, both as to the grade of instruction and as to its *per capita cost.* He ridiculed the "high-falutin'" accounts of the university in the reports of the board of regents, and complained that the money derived from the Congressional grant for a university was being squandered "for the instruction of boys in those studies which are or ought to be taught in every district school in the state." The fund, he said, should remain unappropriated until the class of students for whom this munificence was designed should "knock at the door of the university," or, and here he unmasked the underlying animus of the attack, they should "devote a part of this fund to those colleges in the state which are now offering instruction in proper collegiate studies." The opportunity for this speech had come upon the motion to appropriate to the use of the board of regents, for the ensuing year, the income of the university fund in accordance with the act of 1854. Earlier in the session, a bill to rescind this law and transfer to the regents the administration of the fund, but requiring from them an annual accounting to the legislature, had been introduced by Senator Charles Dunn, a member of the board of regents. The bill had been favorably reported back by the Committee on Education, but had been once more referred to a special committee which had reported adversely upon it, saying in support of this action: "All experience will show that educational institutions, either academic or collegiate, which are in some degree dependent on annual appropriations, do better work than those which, being removed from want and frequent accountability, relax in their efforts and decline in their usefulness, from the very consciousness of being so removed from such want

and accountability." Two thousand copies of this report and an equal number of the Racine senator's speech were ordered printed for distribution.

The legislature of the succeeding year proved more friendly. It authorized the $40,000 loan for the erection of the third building and provided for the annual appropriation by routine of the university fund income. The very next legislature, however, rescinded the latter provision. The nature of the appropriation for the "main edifice" was widely misunderstood. "A correspondent of a Racine paper had the sublime impudence to represent that $40,000 was asked for by the Regents to build *houses for the Professors* and the falsehood went the rounds of the press. . . . People of the state, even legislators, verily supposed the appropriation was made from the state Treasury."[1]

The struggle between the university administration and its foes reached its height in the spring of 1858. The fight began in April and was waged with great vigor, both on the floor of the legislature and in the press. "The crusade against the university" was "this year led by Mr. Temple Clark, of Manitowoc." He was accused of deriving his strong personal bias from some "woman with a grievance"; but "other senators representing local and sectarian institutions gladly followed his lead." On the consideration of a bill for the establishment of an Agricultural College, pursuant to recommendations of the State Agricultural Society and of Governor Randall's message, sectional eloquence broke out afresh. The leading orator on this occasion was Senator Bennett of Rock County, at that time the

[1] From a communication by Horace A. Tenney, at this time member of the board of regents, who warmly defended the university in the press.

richest agricultural section; its county seat was Janesville, the bitterest rival of the city of Madison, and its educational affiliations were with Beloit College, the most successful sectarian foundation in the state. The farmers, his constituents, Senator Bennett declared, were opposed to such an enactment; the bill contemplated, he said, "only another institution like the enormous pile on yonder hill which is an eyesore to the people of the state,—another institution to plunder and rob the Treasury."

Simultaneously the Janesville *Gazette* fired its annual pasquil. The university, it declared, was "a gross and unmitigated humbug," "a common school gotten up for the benefit of Madison"; the writer "guessed" that the professors each year became more slothful, that there were "too many teachers by half doing nothing and fattening on the University fund"; "a public institution" was "not likely to succeed; it had better be abolished and the general government requested to donate the university fund to the school fund." Such reckless rhodomontade was far from representing the better sense either of the people or of the legislature; yet it contained a certain element of truth. And the popularity of any form of attack upon the state institution indicated a wide and dangerous dissatisfaction with university policy. In the face of this temper it was futile to demolish specific absurdities by showing that only seven students in the university were less than sixteen years of age, or that there were thirty students from without the state and eighty-two from other portions of Wisconsin, as against sixty-two from the city of Madison. To set forth the arduous hours of instruction of most of the faculty or to attempt to explain the intricate processes by which the finances of the institu-

tion had come to grief would be equally bootless. What was needed was the appearance, at least, of a complete change of policy.

The movement toward such a change was begun by the legislature itself and has usually been construed as an act of hostility toward the university; yet it is exceedingly doubtful if it ought to be so interpreted. Two bills for the reorganization of the university were introduced during this session. The first, generally known as "the Clark bill," was introduced in the senate, April 19, by the Select Joint Committee on university affairs of which Senator Clark was chairman. The "Robbins Bill" which passed the assembly, but failed to become a law, resembled the other in general purpose but differed in important details. Both bills proposed to reorganize the university so as to make it a consolidated group of technical and professional schools. The main object of the reorganization is clearly set forth in a Report of the Committee on Education of the assembly, of which Hanmer Robbins of Platteville was chairman. "Our educational institutions," declared the report, "must spring naturally from the wants of the people. . . . The university, in its present form, is essentially a college with its classical curriculum and a preparatory department attached." The opposition to the university, the committee stated, was due to the fact that it did not "occupy its true educational position." The committee believed that denominational schools would provide for classical education. "The university should consist of a series of departments or schools, as, for instance the normal, agricultural, mining, engineering, etc., developed in the order of their industrial importance." The wants of the public would be better served if these were made departments of the

university, "concentrating the means of the state into an institution which would meet the need of the masses for technical education."

To accomplish this object the Robbins bill ordained that the university should consist of nine departments, viz., of Agriculture, of Engineering, of Commerce, of the Theory and Art of Elementary Instruction, of the Mathematics and Natural Sciences, of Philosophy, of Law, of Medicine. It provided for the elimination of the preparatory department after a term of years, required that the normal department should be put into immediate operation and that the regents should exercise promptly the power already conferred upon them by law of admitting females to the benefits of the university on an equal footing with the other sex. In addition to the changes in the organization of the university some important changes were made in regard to its government. The power of the chancellor was limited by making him *ex officio* a member, but not president, of the board of regents. Also the bill proposed to regulate the constitution of the board of regents by providing that in the future not more than three should be elected from any one county. To secure a more full attendance upon the meetings of the board, a provision was inserted, vacating the seats of those who should hereafter be absent "from two successive regular meetings thereof."

Serious in spirit, intelligent, and temperate in tone, this bill with the accompanying report marks a wholesome change in the demeanor of the legislature toward university affairs. Whether one agreed with the programme laid out or not, it was intelligible and it was honest. What the cooler sense of the legislature now proposed was, not annihilation of the university, but a reconstruction which should bring it into closer corre-

spondence with the wants of the people. The erection of the technical departments of agriculture, engineering, etc., into coördinate schools indicated, to be sure, an impatient desire for a more energetic development of these activities, but it indicated, also, a disposition on the part of the legislature to stand back of the university as the agency for correlating in a single institution all the higher educational activities of the state. To the chancellor and regents the criticism of their policy implied in the new plan, coupled, as it was, with the proposed changes in the government of the university, might well seem to be only a culmination of recent bitter attacks upon the institution as such; but, in reality, in so far as the university was a state institution which did not stand or fall with any particular group of persons or policies, the proposed reorganization amounted to a re-adoption of the university by the people. There are ample indications that the state was by this time heartily sick of its orgy of political selfishness and frivolity. Had it not been for fast-coming events which soon overshadowed all other concerns, it is highly probable that the state government would have bent itself very soon to the task of building up the university with something of the spirit which animated its efforts at the close of the war.

Decency and proportion, alike, counsel against deep delving in venerable scandals. It is necessary, however, to observe that there was, for the time, a want of perfect unanimity in the faculty itself. Some of the faculty thought that the chancellor, by virtue of his influential position in the board of regents, was vested with disproportionate authority, and that the faculty were insufficiently consulted on matters of internal management. Also, they appear to have agreed with outside critics

that the chancellor was not fully abreast of the times and not dealing competently with the new demands in university education. The most aggressive of the reactionary group was Professor Conover. Together with Professor Carr, he had been in close relations with the education committee during the recent session of the legislature and had been largely instrumental in reshaping the amorphous Clark bill into the more logical and practicable Robbins measure. Of the same party was Professor Kursteiner, a fiery young Swiss who had personal differences with the chancellor, and there is good reason to believe that Professor Sterling was in sympathy with the main features of the new plan. Professor Read, it appears, aligned himself with the chancellor.

The Robbins bill, however, having died on the calendar, the chancellor and regents determined to forestall a return to the subject on the part of the legislature by means of a voluntary reorganization. A special meeting, called for June 2, failed of a quorum and adjourned, after listening to an address from the chancellor, in which he interpreted the recent agitation in the legislature. The following day, having obtained the attendance of another Madison member, the regents proceeded with their reorganization. The "Ordinance" adopted at this meeting purported to carry out the designs of the Robbins bill but, whether astutely or stupidly, differed radically from it. The regents had, as a matter of fact, no authority to change the "organic act" in the manner proposed by the bill which had passed the assembly. They, therefore, resorted to the device of reconstituting the Department of Science, Literature, and the Arts as a group of "Schools, to wit, of Agriculture, of Commerce, of Engineering, of Natural Science, of Philology, of Polity." How far this absurd form of organization

was due to the legal necessities of the case, how far to a failure to apprehend the logic of the Robbins bill, or how far it was (as was openly charged at the time) "a mere trick to hoodwink the public" while accomplishing ulterior ends of the chancellor and regents, cannot be determined with certainty. The last imputation received some color of probability from the fact that the "Ordinance" sheltered a clause abolishing all existing chairs of instruction and declaring all appointments thereto null and void,—a revolutionary action which the regents held to be a necessary feature of their scheme of reorganization, but which had been in nowise contemplated by the Robbins plan. This clause was opposed, not only by Professor Carr, who was at this time a member of the board, but by Regents Draper and Pickard and later McMynn, all of whom, from their occupations and character may be supposed to have had educational, as opposed to personal and political, ends in view. It was carried by the chancellor, plus the group known in contemporary diatribe as "the Madison conclave," viz., Regents Vilas, Abbott, Jones (secretary of state), and Tenney, author of the "Ordinance."

If the charge was true, that the plan was merely a ruse to meet the popular demand for change by a nominal reconstruction of departments while, at the same time, bringing about certain changes of personnel which they themselves desired to effect, the chancellor and his party shot beyond their mark. At the preliminary meeting in June, a committee was appointed to confer with the normal school regents with a view to coöperation between the two boards, and another to open correspondence with reference to a reconstitution of the faculty. The chancellor was appointed chairman of the second committee, a fact which did not escape sarcastic com-

ment. At the semi-annual meeting, July 17, the chancellor reported that substantial progress had been made in negotiations with the normal school regents on the one hand and with Dr. Barnard of Connecticut on the other, and recommended that the board consider the election of Barnard to the headship of the School of Normal Instruction in the university. The normal school regents had promised, if this were done, to appoint him to a joint post of General Agent for the organization of the normal system of the state. "In order to disembarrass the action of the board in this behalf," the chancellor tendered his resignation.

Two days later, the resignation was accepted, and Henry Barnard was elected chancellor of the university. In the meantime, considerable changes were made in the reorganization ordinance, the necessary chairs of instruction were provided for and the board proceeded to the election of the new faculty. Reluctant to humiliate the chancellor, the regents made what amends lay in their power by the adoption of eulogistic resolutions and by promptly reëlecting him to his old chair of Ethics and Civil Polity. Sterling, Read, and Carr were reëlected, with little opposition, to their respective professorships; Kursteiner and Conover were not reappointed. After several ballots, J. C. Pickard was elected over the former to the professorship of Modern Languages, his brother J. L. Pickard casting one of the three votes against him. He was declared by many to be inadequately equipped for the duties of this chair, and was superseded two years later by John P. Fuchs, a protégé of Carl Schurz. The fiercest contest, however, came upon the election of a professor of Ancient Languages. There was prolonged balloting, running over two days, during which five of the board stood firmly for the reappointment of Con-

over; but, finally, on the twelfth ballot, the voting broke in favor of J. D. Butler of Wabash College. The new staff was completed by the appointment, to a newly created instructorship in Engineering, of T. D. Coryell, the first graduate of the university to be given a post on its faculty.

Henry Barnard was not destined to occupy the significant place in the annals of the University of Wisconsin which he achieved in the history of American education at large. Ill health prevented him from taking up his duties until near the end of the academic year, 1858-59, and after repeated interruptions, a formidable recurrence of his nervous disorder compelled him to retire permanently from the state before the expiration of another year. Chancellor Lathrop's resignation became effective in January, 1859; at Barnard's request, he remained in charge until the end of the academic year; he then withdrew entirely from the university. Barnard arrived toward the end of May, addressed the board of regents at a called meeting, June 22, and was installed on Commencement Day, July 27, 1859. Early in May, following, he returned to the East, proffering his resignation in June. The regents, giving up hope of his immediate recovery, formally terminated his connection with the university in January, 1861. During a good share of the year, 1859-60, and for a term of years thereafter, the internal administration of the university was in the hands of the faculty, under the chairmanship of Professor Sterling.

What might have been the subsequent history of the institution had it retained Barnard's leadership is, of course, conjectural. Probably the university would have taken much more promptly an important position in the normal system of the state. Whether its failure to ac-

quire this position of influence is matter for regret may be doubted. Barnard's chief interest lay quite frankly outside the realm of university education. Six years earlier, he had declined the presidency of Michigan and it seems clear that he was attracted to Wisconsin mainly by the promise of liberal provision for normal instruction in the state and by the opportunity to uplift the teaching profession and the education of the masses. During the short and broken period that he was in the state his energies were almost exclusively directed toward these ends. A meeting of the State Teachers' Association in Madison, coincident with his inauguration, gave him an early opportunity to appear before the teachers of the state and explain his projected relations to them. At this time, he publicly offered to contribute, out of his own means, one-half the salary of a state agent to awaken interest in popular education. The following autumn, sixteen teachers' institutes were held at different points in the state, of which ten were visited by the chancellor of the university. The prestige of his name drew large audiences. At a final round-up, held in Madison, Barnard, summarizing the achievements of the first season, estimated that the institutes had conveyed direct instruction to fifteen hundred teachers, involving twelve hundred schools and forty thousand pupils. He estimated that ten thousand people had attended the evening lectures. Eighteen institutes were projected for the following year. Besides giving himself to these platform labors, Barnard composed a voluminous mass of *Papers for Teachers* which he published at his own expense for circulation in the state. The announcement of a Normal Course commencing on the tenth of April, 1860, brought together at the university a class of thirty "Ladies" and twenty-nine "Gents"; but the chancellor was then

on the eve of his final departure and their instruction fell into other hands.

On the part of the university, the traditional feeling toward Barnard seems to have been one of mild resentment. One who was a student in the early sixties has referred to him as "an ornamental Chancellor whose only known function in college affairs was the periodical drawing of his salary." Investigation proves the implied charge in regard to salary to have been unjust. On the contrary, he loaned the regents three thousand dollars for the completion of University Hall. But university folk were naturally offended by Barnard's relative indifference to the institution. There is a tradition that he "never gave a lecture or heard a recitation and met the students but once in chapel." Insubordination of the students during the year of his incumbency appears to have been expressive of dissatisfaction with the changed order of affairs with reference both to the chancellor and the professor of Ancient Languages; and the faculty, a little later, in calling attention to the need of a chancellor, pointedly suggested the choice of some man "not too great for the place." Barnard's first address to the board of regents contained some interesting proposals, but inasmuch as they did not become effective they hardly form a salient part of university history. He condemned the dormitory system, declaring that this drain upon the resources of the institution must be brought to an end "at once, thoroughly, and forever"; but no steps were taken to carry this recommendation into effect. During the first year after the reorganization the work of the preparatory department was restricted to instruction in Latin, Greek, and Mathematics, and the remaining elementary subjects were removed to a separate "commercial" department, the latter created

by annexing a local business college under the direction of David H. Tullis. After Barnard's arrival, the work of the preparatory department was, on his suggestion, transferred to the village high school, of which Professor Conover had become principal. Two years later, however, a tutor was again appointed, the old preparatory system was resumed, and the reorganization provision for its discontinuance at the end of five years was conveniently forgotten. In other respects, save for the few changes in the personnel of the faculty, the reorganization was merely nominal. The several "University Schools" corresponded to nothing in the actual operation of the institution, and, after a couple of years, the various "faculties," with the shadowy chancellor at the head of each, surrendered their space in the annual catalogue.

With the elimination of Chancellor Lathrop from the government of the university and the fading of the hopes which attached to his successor, there passed the first phase of this experiment in higher education under popular control. Year by year, popular hostility to the administration of the institution had focussed with increasing bitterness against the first chancellor, and although one ought not to overemphasize the chancellor's personal responsibility for the mistakes and failures of these years, there is good warrant for attaching some significance to his personal qualities and ideas.

Chancellor Lathrop has been characterized by Professor Butler as "an elegant scholar and an elegant man." "His eminent qualities and fine attainments as a man and a scholar," the regents affirmed, "excite our admiration and command our unqualified respect and esteem." A letter "signed by every student in the university," published in the newspapers when his resigna-

tion was imminent, attested the warm regard and loyalty of the student body. "He was," we are told by a student of his day, "a very pleasant and dignified gentleman, brilliant in conversation, as well as a man of learning and culture, and easily won and always retained the admiration and respect of all his pupils." Bishop Fallows has characterized his manner as "courtly, dignified, and yet affable." An elderly lady of competent taste has described him to me as "strictly *au fait*." We get an impression of a rather small, very neat figure of handsome appearance, in frock-coat, Henry Clay stock, and silk hat. His writing, which we know chiefly from his annual reports, is correct and forcible, tending toward a formal elegance of diction and expanding, at times, into a somewhat pretentious statement of insignificant matters. At such times we are apt to have an uncomfortable feeling that he is "putting up a front." And this coincides with accounts of his manner of encountering legislators on their visits of inspection. The students are said to have admired his mastery on such occasions; but the visitors were apparently less taken in than the boys supposed. Against the rough background of hard-headed frontiersmen and pioneer squabbles, the first chancellor presents a pleasant and slightly pathetic figure. He seems to have had an insufficient grasp of the business necessities of the situation and he was little adapted to do battle with the determined brigands who infested public life during a good share of his régime. He never acquired any force in the public life of the state. And, though he was intelligent enough to grasp and to state with fair adequacy the new university idea, his heart and his practical force were with the older system of education.

In fact, Lathrop was so little in sympathy with the

underlying idea of the reorganization proposed at the end of his administration that he considered it purely nominal and accepted it merely to appease popular sentiment. His "communications" to the board of regents upon this subject are among the most substantial of his utterances that have come down to us. His opinion as to the relative responsibility of the state toward general and toward practical education was the reverse of the popular opinion. The primary object of the general government in endowing, and of the state constitution in ordaining the university, he stoutly maintained, had been to provide for liberal education. As between liberal and professional education, if either must be left to individual enterprise, it should be the latter. He gave precedency over other technical departments to that of normal instruction, because this was most closely related to general education, and he placed the "learned professions" ahead of technical and industrial vocations in their claims on the university, because, "whether we desire it or not, it is still true, that a more liberal style of general culture is demanded in these professions than in the others." He graded the various professions in the order of their "social rank as determined by the amount of personal culture essential to excellence in each." "The farmer," he declared, "may indulge in the same professional pride with the lawyer when it is understood that the average personal culture of the former is the same as that of the latter." These are aristocratic ideas; such views were little apt to ingratiate the propounder of them with the frontier society in which he was compelled to operate.

The same order of sympathies determined his attitude toward faculty organization: "There are two plans on which the 'Faculty' may be constituted and the same

general results reached. One is by distributing out to the several chairs, different branches of philosophy and science, and pushing these forward in courses of instruction, to their outgrowth in the Arts, and the various forms of social service. The other is to distribute to the professorships or schools, the practical *business* processes, carrying the pupil back in the lecture rooms to the science and the philosophy explanative of the nature and the reasons of these processes. The former course is natural and thorough, and tends to a higher order of personal culture; the latter is popular and superficial, but productive of dexterity and skill." He ridiculed the shallow idea that an institution organized on the latter plan might be called a university and the other a mere college: "the trumpets have flourished—the name is reformed, and that is all." "The pertinacity with which this distinction has been pushed here," he added, "is a phenomenon in the educational history of Wisconsin." It is clear that Chancellor Lathrop had little notion of the degree of specialization which was soon to be introduced into the teaching of applied science, and also that his theory was in direct antithesis to the popular idea of the university which conceived of it as responsible for instruction applicable to the various occupations in the order, not of the personal culture involved in each, but of their social utility. The old order was changing, slowly yielding place to the new, and Chancellor Lathrop belonged to the old order.

THE OLD SOUTH DORMITORY

(now South Hall)

V

BUCOLICS

HAVING sketched the administrative vicissitudes of the university during these introductory years we should now have a look at its inner life; and this means primarily student life. Large as it bulks ordinarily in educational histories, usually written, it should be observed, by representatives of its own point of view, the faculty is, after all, from some points of view, a *tertium quid*. Faculty men are known to have remarked that university life would be ideal if one could be rid of the students. On the other hand, some students succeed fairly well in realizing an ideal which is the reverse of this. Neither element is quite negligible from the standpoint of the other. And unreal as the faculty frequently is to the student—who is not in trouble—it is less so than the administration. I well remember one morning in undergraduate days when, making my way tardily toward a class, I met a lot of fellows prancing homeward on an impromptu holiday and, on inquiring the cause of their hilarity, was greeted with the jubilant chant, "*Regent dead!*" Now that I am more fully aware of that gallant gentleman and able regent whose loss to the world gave us a Roman holiday, I am sensible of our unconscious brutality. Probably no "prof" ever suffered from exactly this degree of student willingness to ignore the seriousness of an occasion. For the purposes of the present chapter, however, the faculty will be

found tucked away in its due place, as one of the factors of student life.

A central condition of student existence, as well as one of the business problems of the university in early days, was the dormitory system. It became customary later on to refer to the dormitories rather regretfully as if they had been a misguided extravagance of Chancellor Lathrop's régime; and perhaps they were. He insisted on them, however, and so far as I can find, without challenge, throughout his period of control; though he reluctantly admitted in his last official document, the report to Barnard, that perhaps the economic necessity for them no longer existed. One suspects that he attached importance to other reasons for their existence; but the reason upon which he laid stress in his published utterances was the economic one. "The subject of the supply of board to students," he earlier stated, was "a matter of paramount importance in its bearing on the patronage of the university." To the student who did not live in Madison, the university was first of all a hostelry. Many of the students had little means. Frequently they worked on farms and attended the university only during the winter months, or they taught in country schools in winter and returned to college in the spring. At these seasons of the year, Madison was always full of legislators and there was great difficulty in securing board. The only part of the village that had been built up at this time was a mile away from the university, and even had it been nearer, private board was beyond the means of the majority of students.

The institution must provide shelter if it was to invite patronage from afar. This it did at the cheapest possible rate. Rooms in the dormitories were "$5.00 per term (including wood and janitor service)," in 1852.

Board, without lodging, in private families, was estimated at $1.25 to $2.00 a week. In the "mess hall," "expenses of the table need not exceed 80 cents per week to each member of the association," declared the catalogue. It proved somewhat more expensive. The actual cost of board at the commons, in 1855, was $1.72, and, in 1857, the student-faculty mess at South Hall ran $1.90, a week. In 1859, the chancellor reports: "By far the greatest number of our students, not residents of Madison, board themselves, at their rooms, at an expense varying from 70 cents to $1 per week." John Muir, who was at the university two or three years after this, relates in his *Autobiography* that, in order to save money for books and apparatus, he sometimes subsisted for considerable periods on an expenditure of fifty cents a week for food. The university year was changed, in 1853, from two terms of twenty weeks, to three terms of thirteen weeks each, to meet the convenience of students. This released the farm boy for the spring work and opened a summer term to the rustic schoolmaster. At the same time, tuition was reduced from ten dollars to five dollars and "room, heat, etc.," to three dollars per term. The necessary expense of a year at college was estimated in the catalogue of 1858, at "$118, viz., Tuition $12.00, Room $9.00, Heat $7.00, Board $75.00, Washing $15.00, with the possibility of a refund of ten or twelve dollars in the *last two items!*"

The creature necessities, we will not say comforts, provided for, it may be assumed that the student's thoughts next turned to his studies. Relatively few students in those days went to college simply because it was "the thing to do"; some of them went, no doubt, because college was a delightful place to be, offered a life to be preferred over the hard work of farm and shop; a few

went because they "liked to study"; but the vast majority, and those especially who made sacrifices and worked hard to win their way, went merely to "get an education." Getting an education did not yet, though we have seen that the idea was beginning to have prominence, mean so definitely as it has come to mean, preparing for some particular occupation. Getting an education, so far as it was a matter of ambition, meant raising oneself above one's fellows through the acquisition of intellectual power, through admission to the intellectual life. In a mercenary sense, it seldom meant anything much more definite than a preparation to live by one's wits instead of by one's hands. Because of this indefiniteness it is apt to seem to us, though we may be deluded on this point, that the student of former times possessed, on the average, a purer intellectual curiosity, than his successor of today. Whether this was the reason or whether he was confined to them by the poverty of his opportunities, studies occupied a good share of the student's time and interest in the days of the chancellors.

Let us, then, look at what was set before him. We can afford to give our attention pretty exclusively to the regular classical course, since at this time and for a considerable while after, it was the backbone of the college, and since we shall be occupied later with the departures from it. Those whose memories go back a little way, even if they did not pass through the old-fashioned regular course, will have it pretty definitely in mind, for it persisted in slightly modified forms up to a relatively short time ago. Younger readers may be interested in seeing what, precisely, this antiquated scheme of study was like. I shall insert, therefore, a tabulation of subjects compiled from the catalogue of 1858-59. It

CLASSICAL COURSE 1858–59

	First Term	Instructor	Second Term	Instructor
Freshman	Algebra	Sterling	Plane Geometry	Sterling
	Solid Geometry	Sterling	Mensuration, Surveying, Navigation	Sterling
	Livy	Butler	Horace—Odes	Butler
	Xenophon—Memorabilia	Butler	Homer—Iliad	Butler
	History of United States	Read	English Language	Read
Sophomore	Analytical Geometry	Sterling	Differential Calculus	Sterling
	Horace—Satires	Butler	Integral Calculus	Sterling
	Homer—Iliad	Butler	Tacitus—History	Butler
	French	Kursteiner[1]	Æschylus—Prometheus	Butler
			French	Kursteiner[1]
Junior	Mechanical Philosophy	Sterling	Spherical Trigonometry	Sterling
	General Physics	Sterling	Astronomy	Sterling
	Tacitus—Germania and Agricola	Butler	General Physics	Sterling
	Demosthenes—De Corona	Butler	Juvenal	Butler
	Rhetoric	Read	Plato—Gorgias	Butler
	English Literature	Read	Mental Philosophy	Read
	Mental Philosophy	Read	Logic	Read
Senior	Chemical Philosophy	Carr	Organic Chemistry	Carr
	Inorganic Chemistry	Carr	Geology	Carr
	Ethics	Chancellor	Botany	Carr
	International Law	Chancellor	Constitutional Law	Chancellor
	Civil Polity	Chancellor	Political Economy	Chancellor
	History of Philosophy	Read	History of Civilization	Chancellor
	Christian Evidences	Read		

[1] Superseded, this year, by J. C. Pickard.

may be taken as fairly typical. So far as concerns the difficulty of some of the subjects, it is slightly more advanced than the corresponding course of ten years later. This does not mean, necessarily, that the plane of study was higher, since the manner of teaching was of importance as well as the titles of courses. To add to its historic content, I have included in the table the probable teacher of each subject. In this year there was a return, only temporary however, to the semester term.

The pedagogic ideal underlying this scheme of subjects is worthy of attention. Mathematics, Greek, and Latin furnished the main substance of the first two years and were continued into the third, carrying the student through Calculus to Mechanics in Mathematics and to the reading of Juvenal in the Latin and of Plato in the Greek. Then began the rounding out of the student's knowledge by analytic and descriptive courses in the various sciences and in mental, political, literary, and ethical philosophy. The number of these latter subjects was many and the time allotted to any one of them was brief; but, if the work of the preceding years had been well done, the teacher was dealing with minds which could be counted on to possess certain definite knowledge and to be thoroughly disciplined in memory, perception, discrimination, and reason, by a prolonged course of intensive study and correction in mathematics and language.

It was an orderly, self-denying scheme of study, patient in spirit and deliberate in movement, which aimed to provide a discipline in principles and precision in details, rather than to supply information that was abundant, exciting, or obviously useful. An exact and discriminative mastery of a limited scheme of knowledge, crowned by a philosophy, was the object in view.

As the volume of knowledge became more vast and the interest in its utility more eager, with the progress of investigative science, the system went to pieces. It is by no means certain that we have yet devised a satisfactory substitute, or set of substitutes. It is quite certain, however, that the old scheme had ceased to be adequate and was bound to go. The strain on its periphery is already perceptible in the programme shown above. A year later, German, because of its obvious utility in a state containing so many citizens of German birth, was crowded into the fourth year, forcing out History of Civilization and reducing the time devoted to chemistry. In 1860, too, a so-called "Scientific Course" was formulated. This we learn was "the same as the Classical, omitting the Ancient Languages," but occupied only three years. The catalogue explained that "most of those who pursue the course, however, take Latin, which is earnestly recommended." One of the advantages of this course, from the standpoint of popularity, was the absence of the ancient languages from the requirements for admission.

The teachers with whom the student came in contact were few in number. At no point in his course would he meet habitually more than three men, and these he met daily. When we remember in connection with this fact the smallness of the classes, we see that the student was practically under a system of intimate tutorial direction. During his first three years he would have daily drill in Mathematics, followed, in his third year, by lectures and demonstrations in Physics and Astronomy, from Professor Sterling, who held the chair of Mathematics and Natural Philosophy throughout this period and continued in the service of the university for many years to come. Every graduate of the university

for upwards of a quarter century, had a substantial share of his instruction from this one man. It is not surprising, therefore, that Professor Sterling, with his qualities of steadfastness, loyalty to duty, and unfailing kindness, was long held in affectionate remembrance by the alumni as the "father of the university."

The professor of Ancient Languages and Literature would be met by the student twice a day until the end of his junior year. This post was first occupied by Obadiah M. Conover, who was appointed tutor in 1850, and advanced to the chair in 1852. He was a man of refined scholarship and delicate literary appreciation, and occasionally a poet. Some of his verses that have been preserved are not greatly inferior to the better work of Longfellow and are in somewhat the same taste. His successor was Professor James Davie Butler, who held the chair for ten years. Professor Butler visited Madison at Commencement, 1857, to deliver the annual address before the Literary Societies. A fastidious newspaper critic referred to his address as obscured by "the haze of paraded scholarship," but he must have made a favorable impression upon the authorities, since he was called to the university the following year. Both Conover and Butler continued to reside in Madison and to associate with "the university set" after their respective resignations. The former was Supreme Court reporter until his death in 1884, and served on the board of regents from 1859 to 1865. Professor Butler spent the remainder of his years in travel and erudite retirement, and lived to an advanced age. He was the only one of "the giant race before the flood" who came within my personal ken. To restive undergraduates of the later time, he was known most vividly for the circumstantial plenitude of his prayers on large university occasions.

Professor Butler possessed strong antiquarian tastes and had a prodigious habit of hiving quaint and curious tid-bits of forgotten lore which he unloaded at odd times. He used frequently to come booming about the Shakspere alcove in pursuit of some recondite clue. He was a small man but his voice was big, and sounded, against the library hush, preternaturally so. In his closing years his anniversary became a day of pilgrimage for the devout, and they were many. With a little art, he might be developed into a mythus of the former age in its addiction to venerable and useless learning.

Professor S. P. Lathrop was called to the chair of Natural History in the spring of 1854, in order that the first graduates of the university might not be launched upon life without a knowledge of Chemistry, and gave the first university courses in the subject with apparatus borrowed from Beloit College. Professor Lathrop died in December of the same year and the question of his successor was not settled until the following September, the board of regents being engaged in a lively dispute over a proposal of some of the members to disband the university for a year pending a reorganization. This movement failing, Ezra S. Carr, M.D., was elected and arrived the following winter, in time to give the instruction in Chemistry to the class of 1856. John P. Fuchs, M.D., was appointed tutor in Modern Languages in 1854 and advanced to the professorship the following year. After serving one year he was succeeded by Auguste Kursteiner, who gave way two years later to J. C. Pickard, who also served two years, after which Professor Fuchs returned. In September, 1854, Professor Daniel Read was elected Professor of Mental Philosophy, Logic, Rhetoric, and English Literature and began his duties at the opening of the next academic

year. With the exception of a few tutors and one or two temporary appointments, this exhausts the personnel of the faculty down to 1867-68, when Professor Read resigned and Professors Butler, Carr and Fuchs were shaken out in the course of President Chadbourne's energetic rejuvenation of the teaching staff. Of the men enumerated, two: Sterling and Conover, were graduates of Princeton; two, Butler and S. P. Lathrop, of Middlebury College in Vermont; two, Fuchs and Kursteiner, were foreigners; Read was a graduate of Ohio University, Carr of a medical college in Vermont, and Pickard of Bowdoin; both Chancellor Lathrop and his successor were Yale men. Conover and Butler had degrees in divinity but seldom preached; Carr, Fuchs, and S. P. Lathrop were graduates in medicine. Chancellor Lathrop carried more weight of years than any of his staff, being sixty-eight at the time of his resignation. Barnard was about twenty years younger. At the same date, Read was fifty-three, Butler forty-three, Sterling forty-two, Carr thirty-nine, Fuchs thirty-five, and Conover thirty-three.

Of the character of the instruction it is possible to gain a fairly clear idea. The announcements of the classical department (Professor Butler) indicate that linguistic subjects were already on the defensive. One passage refers to "the light always radiating from words upon things." "The study," it promises, "will be an exercise not of verbal memory, but of philosophical memory, of discrimination, of rendering reasons, and of research concerning things no less than words." The context makes it obvious that "things" of antiquity were in mind; there was little or no appeal based on a fictitious "application to life" of philological studies. It is stated, however, that "no pains will be spared to

make the classical languages *elucidate our own vernacular.*" Professor Read and the chancellor imparted instruction to the more advanced classes by means of lectures and of classroom discussions based upon textbooks. In addition, the latter met the college every morning in chapel and performed one hour of teaching, daily, in the classical department. Professor Read instructed everybody in composition and declamation, holding his exercise at three in the afternoon.

The work in science consisted entirely of the old-fashioned "short courses" which have now been abandoned. Expositions by the professor, with illustrative experiments, were noted down and memorized by the student. In Professor Carr's courses the recitation of the student consisted of a lecture "on the same subject and after the manner of the Professor." Besides written examinations, there was held, at the end of each term, a series of orals open to the public, at which the student had an opportunity to display his attainments. On one of these occasions, a local newspaper, in its character of preserving the public health, was gratified to record the presence of the entire faculty, while deploring that, at times, some of them were prone to neglect the attendance on these exercises. Professor Carr's method of instruction appears to have borne direct fruit, for another reporter was amused by the "solemn and professorlike" demeanor of his students while presenting their subjects. There was, as a matter of fact, little for the student to do save follow in the footsteps of the professor and of his textbooks. There was no laboratory practice. The "one small room for apparatus, chemicals, etc.," was, "much of the time, occupied by Dr. Carr in his preparations for the various experiments performed before the class." The other departments

were even more bare of material facilities. An invoice of 1863 shows that the "philosophical apparatus" up to that time accumulated by Professor Sterling had cost about a thousand dollars. The most considerable items of expenditure had been for a microscope, an "electrical plate machine," an "Atwood's machine," an air-pump, a surveyor's transit and compass, a terrestrial, and a celestial globe. There was also a Natural History cabinet in charge of Professor Carr, by him valued at $15,000 and declared to be, with the exception of that of the University of Michigan, the most valuable collection in the Northwest. The beginnings of this collection dated back to the first meeting of the board of regents when Horace A. Tenney of Madison, who gave his services gratuitously, had been authorized to incur a limited expense for the collection of specimens. His modest accumulations had been greatly augmented in 1856, when the regents recklessly appropriated $1,200 for the purchase of the private cabinet of Dr. Carr. During the same year, the university received from ex-Governor Farwell "a collection in Natural History, comprising the fauna of Wisconsin and the Northwest, and enriched by specimens from other portions of this Continent and from the Old World." Later references to the dusty minerals and "mangy animals" of this collection are less deferential in tone.

The other movables of the university at the time of the above-mentioned inventory represented an outlay of about two thousand dollars and included three hot-air furnaces, some sixty-five stoves, sixty-six school desks, about three hundred chairs, thirty-five settees, five lecture desks, twenty-odd tables, one melodeon, an assortment of pails, washtubs, shovels, saws, scythes, axes, and crowbars, a couple of wheelbarrows, one of which was

in "bad condition," and a two dollar clock, apparently in running order. The library of the university was, in 1866, "estimated in the absence of any catalogue, at 2,600 volumes" and had cost $2,110. A by-law of the regents provided that a student might be paid an amount not exceeding that of his fees to serve as an attendant and that he should keep the library "open at least one hour each day."

With such meager helps to imagination did the "hungry" of the fifties and sixties storm the frontiers of science and teach the woods to resound the comely Amaryllis. For his outdoor surroundings, I must refer the reader to a previous chapter, or, if given to fancy and familiar with the spot, he may unbuild all but two or three of the structures that "hide the green hill" and return them to the local quarries, sweep away all the neighboring houses of the town and convert the spaces to oak-openings and hazel copses, shrink the broad elms to saplings, turn the bronze Lincoln to life and send him to the debating circuit in Illinois or to the White House according to the period he fancies. He must leave standing Professor Read's stone house on Observatory Hill and restore the old red brick boarding house or "Students' Club" at the southwestern foot of University Hill; let him turn loose, in the valley between the two, Professor Read's browsing cow, give to the air the crowing of Professor Conover's blooded rooster and stack the spaces back of North and South Halls with about a thousand dollars' worth of wood at three dollars a cord, and then, if by these genial exertions he shall have transformed himself, for the nonce, into a virtuous student of those bucolic days, and if the college bell is not ringing him to early chapel or to class, or to meals, or to study, or to bed, let him take his well-conned Virgil and

let him wander as he lists in the presence of Nature and, with this instructor in hand, learn "to live beneath her more habitual sway."

Pallas quas condidit arces
Ipsa colat: nobis placeant ante omnia silvae—

One readily sees why the early advertisements of the university never neglect to mention the beauty of its *natural* surroundings and the *well-known healthfulness* of its *climate.*

Idealization of the past is—at least used to be—an amiable weakness of human nature; but we need not let it carry us so far as to suppose that the student of any time was always at his book. They had their extra-curricular "activities" in the days of the chancellors, though most of these were taken less seriously than the modern student takes his,—exhausting his sense of humor, perhaps, upon his regular work. There is fair evidence that most of those tests of prowess were in some use amongst them which have been practiced since time immemorial by rustic Anglo-Saxon youth: foot-racing, leaping, boxing, wrestling, at various holds and at rough-and-tumble, turning of handsprings, swimming, various antecedents of the present weight events, and such old games as prisoner's base and duck-on-the-rock. Then there were indoor exercises with chairs, broom-handles, and other domestic properties, homely feats and tricks which anyone with a rustic upbringing will easily call to mind and which would require demonstrations to be made clear to others. Boating seems to have received an impetus from the feminine invasion in the sixties. Exactly when quoits came in, I am not certain; it was a senior pastime in 1870; that it had some tradition by that time may be inferred from scornful references to

the rival seductions of croquet. It is quite plain that the latter could not have belonged to the Saturnian age. There was some organized play at a game resembling cricket, in the fifties. "A match at wicket, between the Olympic and the Mendota Wicket Clubs" took place in the spring of 1858, featured (as a modern reporter would say) by "the excellent bowling of Messrs. C. Shackleford and S. W. Botkin, and the knocking of H. Vilas." The game was apparently something of a novelty and was commended as being "just as pleasant and far less *dangerous* than the old standby of college students, football."

Reminiscent alumni attribute to this period its due share of those boorish pranks, ebullient from youthful gayety or malice, which formerly flourished in all small colleges; but practical jokes are amusing chiefly to their perpetrators, and, their wit being at best largely a delusion of animal spirits, the fun in these has long since effervesced. Doubtless the absence of a list of them from this record will not be sorely felt. We have abundant evidence, at any rate, that whatever the arduousness of their tasks and the privations of their lives, the college men of early days were not prematurely old. Two or three years ago, a gaunt alumnus of the class of '60, piqued by the modern ululations of the annual Alumni Dinner, got up and told us in a reverberant voice, now silent, that although they had no formal yell when he was in college, yet they could and did make a noise. "We yelled when we left for the war, and we yelled all through the war, and we yelled when we came back from the war, and we could yell in those days, I can tell you, we could *yell*," he shouted to us, and, as he put all he could summon back of the early "Sixties" into the last syllable, we thoroughly believed him. Nevertheless,

the college student of the early days was primarily a man of books, pretty definitely set off and asylumed from "the noise and peoples' troublous cries" that annoy the town. Just as the college professor was only beginning to slip out of the clerical mind and habit, and little aspired to be taken for "a man of the world," so the student retained something of the scholastic about him and moved among his fellow-beings faithful to the classic business of his rôle.

It was well for Chancellor Lathrop that he was sustained by an inward vision; for the material institution over which he held sway was poor enough. Its critics were quite within the facts when they said that it was merely "a classical college and academy," and were guilty only of exaggeration when they accused it of being no more than "a High School for the village of Madison." They lacked prophetic vision, to be sure, and they had not the philosophy to realize that everything must have a beginning. Even as a beginning, however, it was sufficiently discouraging. Never, in Lathrop's day, did the university compare favorably in the number of its regular students nor in classical prestige, be it said, with the neighboring denominational college at Beloit. The chancellor had been on duty five years when the first diploma was conferred. The classical college consisted, then, of the two seniors, one junior who did not come up the following year, nine sophomores and nine freshmen. There were, in addition, twenty irregular students "on select portions of the course," and there were fifteen pupils in the preparatory department, forty-one in all. The university reopened in July with ninety-one students, but only sixteen of these were in the regular college classes; there were no graduates and there were but three freshmen. By 1856-57 things had begun to look

better. There were, this year, one hundred and seventy-four registrants of whom forty-three were in the regular course, all but eight of them in the two lower classes. Of the entire number sixty-two were from Madison, eighty-two from other portions of Wisconsin and thirty from other states and territories. The chancellor, ever wistful for signs of hope, was encouraged to report that "the Institution, as to patronage as well as resources" might "now be regarded as established on a secure basis." But that very winter began the determined action in the legislature which forced the reorganization already described and a new chancellor delivered their diplomas to the eight graduates of 1859, considerably the largest class up to that time. During ten years of service Chancellor Lathrop had conferred but fourteen baccalaureate degrees.

But it is not to enhance the pathos which attaches to the memory of the first chancellor that I dwell upon these insignificant details. In our attempts to realize what the spirit of those early days was like, probably we are not wrong in thinking with considerable attentiveness of the smallness of everything, especially of the smallness of the student body. In this day of thousands all going their several ways and doing their hundreds of different things it is not easy for us to imagine the intimacy and concentration of the college relationships of that time. Between teachers and students there is a certain gulf fixed, always, which can be bridged, but seldom entirely closed; differences in age, in experience, and in responsibility make this inevitable. This was hardly less true, apparently it was more true, notwithstanding the small numbers, in the elder day than it is now. But between students it was different. The intensity of the class feeling and of personal feeling as well,

among some of those older groups of hardly half a dozen men sometimes startles us, and we have to pause and reflect that they whittled the same old benches together during "four long years" and sometimes longer, for many of them were "preps" together, and that together they hewed their way through the same tough passages of Xenophon and Juvenal and Calculus, before we can in the least understand them. And sometimes, if we are at all given to reflection and not idolatrously in love with ourselves and our own times, it may occur to us that, much as we have the advantage of them in the expansiveness and the variety of our tasks and our social relations, perhaps we have missed something, too, in missing the concentration and definiteness and even the poverty of *material appliances* which were theirs.

We have to know, also, if we want to understand them, that they were something of an aristocracy in their way; a way that was chiefly unrelated to such personal idiosyncracies as the patches on one's trousers or the manner of securing one's meals; though, it must be admitted, the top-hat seems to have been a totem of high significance. So far as there was an aristocracy it was largely an aristocracy of scholarship; for the students of the regular classes always formed a sort of inner circle even within the small college of that time, which had certain rights and hereditaments. To this there was added a clean-cut hierarchy of the classes which is but faintly reproduced in modern college society. A senior of the classical course who burgeoned forth in a "plug" hat and called on the village belles, went to class to the chancellor, sat upon the polity of states, surveyed the History of Civilization, accumulated Christian Evidences, precipitated chlorides, publicly, "after the manner of the Professor," and, "smiling over the verdant past," coolly

took his pick of the dormitory rooms, was a person worth being in the days of the chancellors. All this was quite as unlike the scholastic democracy and the social selectiveness of our time as any other of their characteristics; but when we once understand it we can understand a great deal better such phenomena as their passionate bigotry a little later against the establishment of a "normal course" "on the ground of its *introducing females into the college,*" with, as they feared, a consequent lowering of its intellectual tone. When we, in our more enlightened day, think we have quashed this objection by pointing to the relative excellence of female scholarship, we totally miss their point. It was their own intellectual tone that they were worrying about, the intellectual tone of a mono-sexual group. Perhaps they were wrong; but they would probably maintain to this day that they were right, were they not, most of them, dead. Therein lies a thundering argument which will go far, in time, to silence their whole generation.

VI

WAR TIMES

THE development of the University of Wisconsin, as of all similar institutions, was much modified by the Civil War. The character of the clientele, the spirit of its students and officers, and its public, its finances, management, activities, all reflected the influence of those stirring events which so profoundly affected the whole country. In its tenacious yet mobile grip on existence during the four great years, in the spirit of devotion and self-sacrifice which "looked on tempests and was never shaken," and finally, in its prompt reconstruction on broader lines and its advance toward a solid success as soon as the war was over, it mirrored, within a limited sphere, with great intensity, the movements of the state and of the nation at large.

First and most obvious of the effects of the war, and also the most picturesque, was the decimation of the college classes by the call to arms. The state of Wisconsin sent to the front, in the course of the four years, upwards of ninety thousand men or about one in five of the male population. Of these more than three-quarters,—about seventy thousand, were mobilized and drilled at Camp Randall, half a mile to the west, and in full view, of the campus on the hill. Thus the university was in full focus of the military excitement of the period.

The city of Madison had the distinction of contribut-

ing two companies to the regiment of ninety-day men which the state sent in response to the first call. A Madison Company had been the first to answer the call for volunteers. Early in January, 1861, the Madison Guards tendered their services to the governor of the state, "in case those services might be required for the preservation of the American Union." Sumter fell on the fourteenth of April. Two days later the President's call for volunteers reached Governor Randall. Captain Bryant's company was notified on this day that the tender of three months before had been accepted and the enrollment of the men began on the day following. The same day, the seventeenth, another Madison Company, the Governor's Guards, tendered its services, which were accepted the eighteenth. A few university students were already members of these companies; others immediately enlisted, and still others joined companies elsewhere. A large share of the university volunteers entered the Governor's Guards. As happens in such cases, the university gave of her best and brightest. A report of the faculty records the names of nineteen students who responded to the first call. Thirteen of them were members of the four regular college classes. Two of the nine seniors enlisted at once and by 1863, five of this class were with the Union Army. The junior class was virtually wiped out, five of its eight members enlisting at the first call; all but one had entered the army by 1863. The sophomore class of eleven had shrunk to six at graduation, of whom two were by that time with the army. But the progressive effect of the war is best exemplified by the class of 1864, the freshmen of 1861. At the outbreak of the war, this class numbered forty-nine, the strongest freshman class the university had yet known. Five volunteered at the first call; one

of these, Pliny Norcross, according to Professor Butler, being the "first student to enlist." After recording this fact, Professor Butler continues, "The lead of Norcross was followed by so many sons of Mars that the largest and best Greek class I ever had was sadly thinned out. When this stampede took place, we were engaged in Xenophon's *Memorabilia*. My own pocket copy, Trübner's edition, I gave to James M. Bull, one of my most zealous pupils. It was his *vade mecum* throughout the war." The class of '64 shrank to twenty-one the second year and to seven the third. James L. High, a member of the class, estimated that seventeen of the class entered the service during the first year of the war, while of the twenty-one who reached the sophomore year, twelve enlisted before the end of the war. Finally, the Regents' Report of 1864 has this news of the remnant: "The members of the Senior class (with one exception) having left the State, along with many other students of the University, as volunteers in the 40th Regiment of Wisconsin Infantry (one hundred-day men) no commencement was held." Five of the class, all that remained of the forty-nine of three years before, were voted their degrees, and of these, as we see, all but one had left for the front without completing the last year. The statistics amply substantiate the statement made by the faculty in 1865: "Every call, from the very first, which has been made by the Government for men has taken from us a portion of our best students, and especially reduced our advanced classes." In addition to those who were drafted directly into the army, many were detained at home to fill the places of older members of the family who had gone into military service. As a result of these depletions, the enrollment in the collegiate department, which had approximated eighty in

1860-61, fell off about twenty the next year, sank to near forty in 1862-63, and fluctuated in that neighborhood until after the war.

With the war uppermost in all minds and with the chief training camp of the state so close at hand, it was natural that the university should become, in some degree, a school for soldiers. In the autumn of 1861, the students organized a company among themselves and were granted arms by the adjutant-general of the state. They drilled daily during two-thirds of the year, under the direction of E. G. Miller, one of the volunteers of the preceding spring, who had returned after serving out his time. The faculty displayed a keen interest in the military aspirations of the students and made numerous appeals for the formation of a military department; but nothing was accomplished in this direction. Nevertheless, the students continued their military activity under the official style of "University Guards," which was soon changed in humorous student parlance to "University Myrmidons." Nor did these fierce young warriors relax their preparations for combat when, in the spring of 1862, Miller resigned command of the battalion to recruit his company for the 20th Infantry. The mental attitude of the students is doubtless well illustrated by Miller's reply when exhorted to remain and continue his studies. "When they ask me fifty years hence where I was during the rebellion, it won't sound just right to say 'grinding Latin and Greek at No. 11, North College.'"

The faculty, in the reports, speak admiringly of the proficiency of the students in drill and note its beneficial effect upon their physical condition and the fortunate reflex of the military sense of duty upon their application to study. The knowledge of military matters

acquired in this manner enabled a large proportion of those who entered the army to commence as officers. James L. High, writing twelve years after the close of the war, estimated the number of students who entered the army at rather over than under one hundred, about one in three of the total number enrolled during the period. Of the entire number of university men, students and alumni, engaged in the war, he estimated that "nearly if not quite one-half" were officers. Of those who had received degrees from the university, it may be noted in passing, whether calculated at the beginning or at the close of the war, just one-half entered the army. In estimating the achievements of university men in the war, it should be remembered that nearly all were men under thirty, most of them much under thirty years of age. The oldest graduate of the institution had been out less than ten years when the war began. When this is taken into account, it is not surprising that university men were most conspicuous, as company officers. High was able to recall thirteen who served as captain, besides several who were promoted from that to a higher rank. Two classes, '61 and '64, each contributed five captains. They were, from the class of '61, Hall of the 5th, Gillet of the 20th, Henry Vilas of the 23rd, Ball of the 31st, and Leahy of the 50th, all infantry regiments. Of the class of '64, Bradley commanded a colored company, Norcross was a captain in the 13th, Miller and Stone in the 20th, and Spooner in the 50th Infantry. The others were Remick, '62, of the 11th, S. W. Botkin, '57, of the 23rd, and Tredway, '63, captain and quartermaster. To these I am able to add, Marsh, '59, of the 29th Wis. ——, and H. C. Bradford, '59, of Virginia, who was a captain on the confederate side,—Washington Battery, C. S. Artillery.

Eight field officers are recorded. William F. Vilas, '58, was successively captain, major, and lieutenant-colonel of the 23rd Infantry. Hubbell, '58, was a major of the 1st Artillery. Fallows, '59, entered as chaplain of the 32nd, and was subsequently lieutenant-colonel of the 40th, and colonel of the 49th Infantry. Bull, '64, a private of the 1st (ninety-day) regiment, became a lieutenant in the 11th, captain in the 23rd and lieutenant-colonel of the 5th Regiment. Of no special class were Dawes, colonel of the 6th Infantry, a division of the famous "Iron Brigade"; Larkin, major of the 38th; Warner, colonel of the 36th; and, finally, "the gallant La Grange" who, entering the service as captain of the 4th Infantry, was promoted major and colonel of the 1st Cavalry, and "achieved a reputation as a daring and skillful cavalry officer second to that of no officer of like rank in the army." Fallows and La Grange were brevetted brigadiers for meritorious service.

If we consider either the number or the quality of the men whom the university sent into the field, the record is a striking one. Of those who had received degrees when the enlistments began one-half were in military service before the expiration of a year. As the war went on, the youngsters came forward, year by year, to answer the increasing calls for men. And when the war was over, they returned to civil life, ripened beyond their years by experience and responsibility, prepared to play a significant part in the upbuilding of the state and of their Alma Mater.

Of course some did not return. No memorial has been raised to them and recollection of them has grown obscure with the passing of their generation. Since many of them left college before graduation they lack even the bare notice of the Alumni Directory. Yet it is not fitting

that their names should lie perdu in musty newspaper files. The roll was called and their personalities were tenderly sketched by a contemporary in words which we can do no better than transcribe. On the 19th of June, 1877, James L. High, of the class of '64, addressed the Alumni Association on "The University and the War." Of those who gave up their lives he spoke as follows:

"I see them in the flower of their youth, marching away to the front, keeping time to the strange music of war which was for them at once an inspiration and a requiem: Ashmore, first of all our dead heroes, of Southern blood and Southern chivalry in its best sense, but whose love for the flag prevailed over all; Comins who fell on the Potomac, a knightly soldier, tried and true, and brave with the valor of the old Puritan blood in his veins; Almon Smith, genial, witty, who died that hardest of deaths to a soldier—a lingering death in hospital; Sutton, dying also in hospital, whose quiet demeanor and hesitating speech, as we knew him in college, gave little promise of the heroic spirit within him; Curtiss, who fell at South Mountain, tender as a woman, but lion-hearted as any crusader of old; Hungerford, who charged with his company up the heights at Fredericksburg, and fell only when his regiment had stormed the very crest; Isham, who did his duty soldierly, and came home with the hand of death upon him, lingering a few weeks, until he, too, received his final discharge; Starkweather, who wasted away in camp until, when the end was near, we sent him home, only to die on the bosom of the Father of Waters before his longing eyes could catch a glimpse of the promised land; and, tenderest of all, Henry Smith, of my own class, whose fair young life faded out on that terrible march of General Steele's division through Arkansas in 1862, a chevalier Bayard, stainless and true, without fear and without reproach."

Although the regular classes were depleted almost to the point of extinction, the faculty labored heroically to

provide every opportunity for study which had existed in time of peace. With very few exceptions every course in the curriculum was kept in operation. It was wisely foreseen by both faculty and regents that, as soon as the war should be ended, there would be a new set toward higher education and that everything would depend upon the readiness of the university to perform its appointed work. At the same time, since it was impossible to prevent the diminution of the regular classes, it became evident that a different clientele must be found. The most obvious sphere of usefulness for the moment lay in the preparation of teachers for the common schools.

The university was at its lowest ebb during the first two years of the war. Only twelve students of college grade were enrolled in the classical course during the winter term of 1862-63, and seventeen in the new scientific course. Including the pupils of the preparatory department the total attendance during this winter amounted to but sixty-three students. Still an effort was made to keep the entire programme alive, and advanced classes were run, in many cases, for the benefit of one or two students. This was naturally felt to be an extravagance. At the same time that it had reduced the university to this pass, the draft made by the war upon the young males of the state had increased the opportunities of women in the schools, and suddenly opened a larger field for the preparation of this class of teachers. In this exigency, the university authorities determined to put in effect their long cherished plan for a normal department which should be equally open to men and women. Charles H. Allen, agent of the board of regents of normal schools, was elected professor of Normal Instruction and Anna W. Moody was appointed pre-

ceptress. South Hall was set aside as a dormitory and boarding houses for women, and recitation rooms for the use of this department were fitted up in one of the wings of University Hall. The precautions that were taken to safeguard the social welfare of the women are indicated by the following advertisement:

"Ladies desiring board will be received into the family of the Professor, and it will be the aim to make both the privileges and the restraints as homelike as possible. A few rooms will be rented in the building to ladies desiring to board themselves; they will, however, be under the same regulations as members of the family."

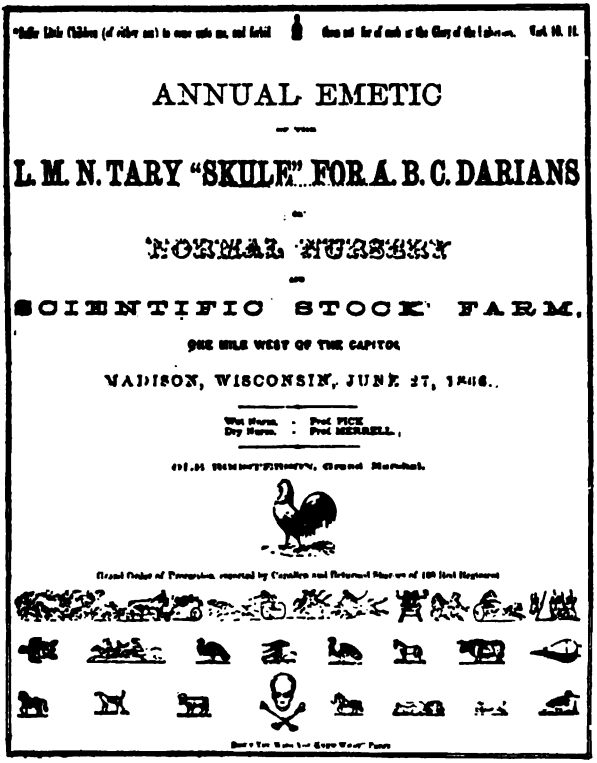
The Normal Department opened on the sixteenth of March, 1863, and the women numbered one hundred and nineteen out of one hundred and sixty-two enrolled in this department, and in 1863-64 the number of women registered in the university was one hundred and eighty out of a total enrollment of three hundred sixty-one. In June, 1865, six "young ladies" had conferred upon them the Certificate of Graduation in the Normal Department.

The course of study designed for the women ran through three years and was of about the difficulty of a modern high school course. Candidates for admission were examined only in the Outlines of Geography, Elements of English Grammar and Arithmetic to Proportion. However, students in this department were carried through higher Algebra and Trigonometry, and were admitted to university lectures in Science, Philosophy, and English Literature. One year of German was required, for which Latin or French might be substituted. Within a couple of years the women had invaded the other departments of the university; so that, in 1864,

we find one hundred and twenty of them classified as "irregular"; and "the following year there were fifty-four in the preparatory department and eighteen in so-called "select studies," against sixty-six in the regular normal course.

In reporting upon the Normal Department (1865) the faculty express the opinion that it "has made the University a more useful institution during the past three years, than otherwise it could have been." But they add: "It is not, however, to be disguised that among former students of the University, and among leading ones now in the institution, there has been a strong feeling of opposition to the Department, *mainly on the ground of its bringing females into the University.*" Coeducation, indeed, had slipped in as a war measure and was the source of considerable irritation after the war was over. As the men straggled back from the field, they found the women in possession, and not having been present to resist the earlier stages of the invasion or to become accustomed to it, they were at first disposed to make a row. The year 1866 was one of considerable turbulence on this account. The discontent of the reactionaries found expression in a characteristic literature which was none too gallant toward the fair invaders and was anything but delicate in its allusions to the pusillanimous males who gave aid and comfort to the enemy. There had been from the beginning some attempt at separation of the sexes, and during President Chadbourne's period of control (1867-70), segregation was vigorously enforced. After his departure, the opposition rapidly broke down, both in student sentiment and in administrative practice. But I shall return to this subject a little later.

The same year that the university touched its lowest


ANNUAL EMETIC

L. M. N. TARY "SKULE" FOR A. B. C. DARIANS

SCIENTIFIC STOCK FARM,

ONE MILE WEST OF THE CAPITOL

MADISON, WISCONSIN, JUNE 27, 1866.

Wet Nurse : Prof. PICK
Dry Nurse : Prof. MERRELL.

STUDENT POSTER, 1866

point in enrollment, it reached the bottom with respect to its financial resources. Following the financial stringency of 1857 the forfeiture of land contracts had begun and these went on at an accelerated pace during the earlier years of the war. There were no land sales to offset these losses, so that by 1863, the university had on its hands over forty thousand acres of forfeited and unsold lands. The actual income receipts of 1862 showed that the productive capital of the university had shrunk to the sum of $199,810. The legislature of this year decided to simplify university finances by paying out of the capital fund the indebtedness which had been incurred in the erection of buildings, thus reducing the fund to about $106,000. This would produce an annual income of a trifle over seven thousand dollars, from which there was still to be deducted the annual state charge of nearly a thousand dollars for the care of the fund. The last of the debt was paid off out of the university fund in 1864. During the last years of the war, finances began to pick up and the annual sales a little more than offset the annual forfeitures, so that, by 1866, the productive fund had crept up to about $160,000. This was little enough; only the most rigid economy enabled the institution to continue in operation. At the time of the reorganization, the annual salaries of the faculty had been set at fifteen hundred dollars and the university share of the chancellor's salary at twenty-five hundred. During Barnard's year, the salary budget, plus the mileage and *per diem* of the regents, had amounted to a little over twelve thousand dollars, which was nearly twice the total net income a couple of years later. This salary scale had been maintained for only two years; in 1860, salaries were cut back to a thousand dollars. In the autumn of 1863, with bankruptcy staring

them in the face, the regents shaved the salaries of the professors another hundred dollars, granting to each his proportional share of the now shrunken student fees. At the same time the practice of paying mileage and *per diem* to regents was temporarily discontinued. In spite of these economies the regents found themselves, in the autumn of 1865, facing a deficit of eighteen hundred dollars, but pointed out that they had on hand nearly enough wood to carry them through the ensuing winter. As a further measure of economy the use of furnaces was discontinued in the dormitories; stoves were set up, and students were required to provide their own fuel. Student relations to the woodpile back of North Hall became, for a time, an important feature of university life.

While the regents were exerting themselves to overcome the material embarrassments of the war period, the little band of university graduates performed their part in keeping alive, amidst other excitements, the spirit of loyalty to their tottering Alma Mater. On the evening of Commencement Day, 1861, an Alumni Association was organized, with Charles T. Wakeley, '54, as its first president. The other officers were J. F. Smith, vice-president, J. M. Flower, corresponding secretary, William F. Vilas, recording secretary, and T. D. Coryell, treasurer. The following Commencement (1862) there was an enthusiastic symposium of alumni sentiment. There were literary exercises at which an oration was pronounced by Charles T. Wakeley, and R. W. Hubbell read a poem which ranged at ease from the creation to the military exploits of the current year. Commencement evening there was a bountiful dinner at a local hotel, followed by toasts, to the generous number of eighteen. Some of the "old boys" were back from the

front and there were letters from others who were still in camp. National and collegiate patriotism vied with each other in extravagance. "One of the most striking features of the occasion was the frequent manifestation of the deep and warm attachment" for ex-Chancellor Lathrop, who was the guest of honor, having returned to deliver the annual address before the literary societies on the preceding evening. This was the first of a series of alumni gatherings which preserved much the same character for a number of years to come. The custom of appointing annually an alumni "orator" and "poet" was continued until 1892.

But it was upon the faculty, and especially upon Professor Sterling, that the burden of keeping the university in operation through these desperate years fell with most hardship. It is hard to see how the institution could have subsisted had it not been saved at this time from the necessity of providing for a chancellor's salary. The duties of this office had been distributed among the members of the faculty. In fact, this had been the situation ever since the incumbency of Barnard, who had not "at any time engaged in the ordinary duties of instruction or internal administration." The work of Normal Instruction, so far as any existed, up to the time of the appointment of Professor Allen, had devolved upon Professor Read. Professor Butler had acted as university chaplain, conducting the regular chapel exercises and delivering the annual baccalaureate address. The duties of administration had been discharged by Professor Sterling, "under the not very apt designation of Dean of the Faculty." After some pressure, the regents, in 1865, changed his title to that of Vice Chancellor. All of these tasks had been performed by the several professors without extra pay. In spite of "much

personal embarrassment from inadequate support, arising from the increased rates of living," they stuck to their posts. To some of them the university salary "afforded but little, if any, over half-support." Yet there was no complaining. They felt it "a matter of duty and professional pride" to maintain the continuity of the institution, in order that it might be ready to make the most of the movement toward education which they were confident would set in, the moment the young men of the North laid down their arms. *"We are to bear in mind,"* they stated in an address to the board of regents, *"that the University is for all time, and it is not to be questioned that the State will sooner or later furnish the means of adequate support."*

VII

THE NEW ERA

THE words quoted at the close of the last chapter were written by Sterling in June, 1865. The better time which they so confidently anticipated was close at hand. The four years' struggle was over and the men of the North turned exultantly to the conquests of peace. For some years a sounder public spirit had prevailed in the official life of the state. Referring to the political conditions by which the institution had been hampered, Sterling expressed the hope that the university had "in a great measure passed the stage of its early embarrassment from these sources." Fortunately, now, the cause of the university was espoused by several state officers whose attitude undoubtedly influenced that of the legislature. Among the individual leaders who should be remembered with gratitude were James T. Lewis, successively secretary of state and governor between 1862 and 1865; Thomas S. Allen, secretary of state, 1866-70, and especially, General Lucius Fairchild, who was secretary of state, 1864-65, and governor from 1866 to 1872. It should be noted that the secretary of state was then, *ex officio*, a member of the board of regents. At an earlier period, this relation had sometimes been of dubious import for the university; but the friendly interest which these men were led to take in its welfare proved of great advantage.

Lewis had been connected with the university at a time when it was not possible for the state to lend it

any financial assistance. At the end of his governorship, however, he conferred upon the university a testimonial of his regard, its first pecuniary gift from a private source. On the eighteenth of February, 1865, he deposited with the treasurer, a United States bond for one hundred dollars, with a request that the interest thereon might be used each year "in procuring a suitable silver or gold medal, to be presented to the student whom the professor should designate as having made the greatest mental and moral progress during the year preceding its presentation." The sentimental importance of the gift is not to be measured in terms of its munificence; the donor was not a man of liberal means. As the sum was not considered adequate for the purpose, he added an equal amount, and the whole was allowed to lie at interest until it had increased to three hundred dollars, when the regents, with his consent, made it the basis of an annual prize of twenty dollars for the best commencement essay. The "Lewis prize," first awarded in 1875, came to be, for a number of years, the most coveted university honor.

General Fairchild was one of the chief military heroes of the state. At the outbreak of the war, he had been the first member of the Governor's Guards to enlist, and entered the army as a captain in the First Regiment, Wisconsin volunteers, sixty-day men. Commissioned captain in the regular army, he was granted leave of absence to serve with the volunteers of his state and was appointed lieutenant-colonel of the Second Regiment, one of the units of the intrepid "Iron Brigade." At the second battle of Bull Run, he commanded the consolidated Second and Seventh regiments, and was noticed for conspicuous gallantry and skill in directing certain difficult and important movements in the field. After

Gettysburg, where he was wounded, taken prisoner, paroled, and exchanged, he was raised to the rank of brigade commander. Returning, with an empty sleeve, to Madison, he was seized upon by the Union party, while waiting for his wound to heal, and induced to run for secretary of state in the election of 1863. Though a relatively young man, his capacity for administration, his frank and energetic views on public questions, and his personal distinction and magnetism immediately secured him the complete confidence of his party and of the state, and he was three times nominated, by acclamation, for the office of governor and each time elected. After his retirement from the governorship, he was appointed by President Grant, consul at Liverpool, was later made consul general at Paris, and was Lowell's successor at the court of Madrid. General Fairchild effectively championed the state university and had an able second in his fellow-soldier, Thomas S. Allen, who was secretary of state during the first four years of his administration, the critical years, it will be observed, during which the university was reorganized on a new and permanent basis and during which the legislature committed itself to the policy of supporting the institution by direct appropriations of money.

The reorganization of 1866 was precipitated by the fact that the period of five years within which the state might "take and claim" the benefit of the Morrill Act was drawing near a close. By the provisions of this act, the state was granted two hundred and forty thousand acres of public land, "thirty thousand acres for each senator and representative in Congress," for the endowment of "at least one college where the leading object" should "be, without excluding other scientific and classical studies, and including military tactics, to teach such

branches of learning as are related to agriculture and the mechanic arts,—in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." There could hardly be a more pointed condemnation of the manner in which the university land fund had been hitherto managed by the state than the care with which the national government had fortified this grant. Not only did it stipulate that all expenses of management should be paid by the state and provide for the safe investment of the fund which should be derived from the sale of the lands; it explicitly forbade the application of any portion of the fund "directly or indirectly, under any pretense whatever, to the purchase, erection, preservation or repair of any building or buildings." In so doing it only declared more specifically the conditions which had been obviously implied when the earlier grants were made. It reinforced the representations which were constantly being made to the legislature by the university authorities, in which, fortunately, they now had the support of the secretary of state and the governor.

Nevertheless, the university was not allowed to inherit the new grant without some opposition from its old rivals. Two bills providing for the disposition of the grant were introduced into the legislature of 1866. A senate bill proposed to confer the grant upon Ripon College, while simultaneously a bill to reorganize the university and endow one of its departments with the Agricultural College lands was produced in the assembly. An interesting contest ensued, the bills coming up for final consideration in their respective houses on the same day. Senator Proudfit of Madison was on the floor of the senate, opposing the Ripon Bill, when word was

passed around that the university bill had just passed the assembly by a vote of forty-nine to twenty-one. In spite of this shock, the bill in favor of Ripon College went through by a vote of seventeen to ten. On the following day, however, the senate, by an overwhelming vote, concurred in the assembly bill, and, two days later, it was signed by Governor Fairchild and became a law, April 12, 1866.

The new organic act accomplished by somewhat different measures a number of the ends that had been sought in the reorganization which came to naught in 1858. In order to qualify it for the benefits of the Morrill Act, the university was made to consist of, first, a college of arts; second, a college of letters; third, such professional and other colleges as might from time to time be added. The college of arts was to embrace primarily "courses of instruction in the mathematical, physical, and natural sciences, with their applications to the industrial arts." The college of letters was to be "co-existent with the college of arts" and "embrace a liberal course of instruction in language, literature, and philosophy." The courses of study in either college were to be supplemented by branches included in the curriculum of the other. By this plan of organization, it was hoped that it would be possible to start the Agricultural College before the funds from its land grant became available, without an initial outlay for buildings and without a reduplication of instruction in those necessary liberal branches which were already taught in the university. The act further provided that all departments of the university should be "open alike to male and female students," that all able-bodied male students should receive instruction and discipline in military tactics, and that "no instruction, either sectarian in

religion or partisan in politics should ever be allowed."

Certain important changes were effected in the government of the university. In place of a chancellor, the law made provision for a president, with more limited powers. Although "the executive head of the institution in all its departments," the president had no seat or voice in the board of regents. The regents, instead of being elected, as formerly, by the legislature, were to be appointed by the governor. To secure a more equal representation on the board of all parts of the state, there were to be two regents from each congressional district and three from the state at large. In addition, the secretary of state and the state treasurer were required to serve, respectively, as secretary and treasurer of the board. In 1869, the law was amended so as to reduce the number of the regents as fast as their terms should expire to one from each district, plus two from the state at large, and the board was allowed a hired secretary, thus removing the burden of this position from the office of the secretary of state. In 1870, the superintendent of public instruction was again made, *ex officio*, a member of the board. This manner of constituting the board of regents has been found, on the whole, satisfactory and adjustable to the growth of population, and except for the later addition of the president of the university to the board, continues to the present time.

The new board of regents was chosen by Governor Fairchild with judicious care and proved a strong one. At its head was ex-Governor Salomon who had served for several years on the outgoing body. He was a graduate of the University of Berlin who had been identified with the state almost from the beginning. His address before the Historical Society on the occasion of its formal occu-

pation of new quarters in the south wing of the capitol (1866) reveals him as a man of culture and intelligent ideals. As president of the new organization, his forceful appeals for financial justice to the university were such as to command attention and he doubtless wielded a strong influence in this direction. The other members of the retiring board who were reappointed were McMynn, the state superintendent, and, a year later, Henry D. Barron, who had been speaker of the assembly of 1866, and continued on the board until 1879. Of the new appointees, several, for various reasons, deserve particular mention. Charles S. Hamilton, of Fond du Lac, succeeded to the presidency of the board in 1869 and served ably in that capacity for six years. Two, Samuel Fallows and J. B. Parkinson, were alumni of the university. The military career of the former has been mentioned above. He succeeded McMynn in the office of state superintendent (1870-74). Parkinson had been a tutor in the university and a year or two later rejoined the faculty, and entered upon his lifelong career in the service of the institution. Augustus L. Smith, a former tutor in the university, had been active in its reorganization as a member of the recent legislature. Angus Cameron, speaker of the assembly of 1867, served as a regent until his election, in 1875, to the United States senate. Others who regularly attended the meetings of the board and were active in the work of reconstruction were J. C. Cover of Lancaster, B. R. Hinckley of Oconomowoc, Jacob S. Bugh of Wautoma, H. C. Hobart of Milwaukee, R. B. Sanderson of Burke, F. O. Thorpe of West Bend, and, until his death, in 1867, Jackson Hadley of Milwaukee. Lastly, through his activity as chairman of the executive committee, N. B. Van Slyke, of Madison, became virtually the

business manager of the university for a period of more than a decade.

The new board effected an organization in the summer of '66 and addressed itself energetically to the task of rehabilitating the institution. An inventory and survey of university property was instituted at once and steps were taken to put it in order. The buildings had been neglected and were disgracefully out of repair. Slates and flashings had blown from the roof of Main Hall and the rains had poured into the building with disastrous consequences. In some of the rooms, the plaster that should have been on the ceiling had transferred itself to the floor. Window panes in great numbers had been broken out and never replaced. The tiny library was uncatalogued and in disorder. In addition to rectifying these physical conditions out of their slender resources, the regents had before them the larger tasks of securing and equipping a farm for the new agricultural department, of impressing upon the legislature the need of more generous support, and of reconstituting the faculty in accordance with the new plan.

By a special act, the expense of administering the university fund had been transferred to the general treasury. This was the only direct financial relief afforded by the legislature of 1866. Advantage had been taken of the contest over the location of the Agricultural College to force upon Dane County a portion of the expense incident to its foundation. The new organic act required the board of regents "to make arrangements for securing, *without expense to the state, or to the funds of the university,* suitable lands in the immediate vicinity of the university, not less than two hundred acres, including the university grounds, for an experimental farm." To this end, another section of the law author-

ized the supervisors of Dane County to issue twenty-year bonds for the amount of forty thousand dollars, the proceeds of their sale to be delivered to the board of regents and by them applied to the purchase and improvement of the aforesaid experimental farm. Unless this action should be taken and the proper guarantees furnished within thirty days after the law became effective, the entire act was to remain null and void. The county officers concluded that it would be to the interest of the county to secure the location of the agricultural college at Madison, and the bonds were duly issued. Under authorization of the next legislature, they were taken up by the University Fund, thus saving to the university twenty per cent. of their value, which it had stood to lose by their hypothecation. With the proceeds of a temporary hypothecation the regents, after considering various other properties, purchased, in 1866, at an aggregate cost of $27,058, one hundred and ninety-five acres adjoining the original campus on the west. The most desirable portion of the tract, that lying along the shore of Lake Mendota immediately adjacent to the campus, had been platted into city lots. The difficult transactions involved in their acquisition from about sixty different owners were carried out chiefly by Regent Van Slyke. With these purchases the university acquired several private dwellings of which the most interesting was Professor Read's stone house which still stands on the crest of Observatory Hill.[1]

The public lands for the endowment of the Agricultural College had been located immediately after the formal acceptance of the terms of the Morrill Grant in 1863. A tier of counties in the north central part of

[1] This house was the presidential residence from 1867 until 1878, and since that time has been the home of the director of Washburn Observatory.

the state, with Marathon County as a center, contained the new university lands. In the location of them, the old policy had been pursued of selecting lands that were suitable for agriculture, on the theory that they would find a readier sale than the pine lands of the north and that their sale would accelerate colonization.[1] The lands were placed on the market in 1866 at the regular government price of a dollar and a quarter an acre. They were sold on ten years' time, one quarter down, the remainder bearing seven per cent. interest. During the first three years, sales were slow, the total fund accumulated by September 30, 1868, amounting to only a trifle over twenty-five thousand dollars. Then the sales took a great bound and, in the two following years, over half of the entire grant was sold out. By 1874, Bascom's first year, the fund had crept up to $236,000, the income from it, for the first time, exceeding that from the original university fund. Thereafter, the best of the lands having been sold, the disposal of the remainder was a tedious process and somewhat insignificant, for, by this time, a new source of income had been found.

The maintenance of the agricultural department had given the university a new "talking point" in its appeals to the legislature, and these had begun to yield some fruit. In response to a memorial from the board of regents, together with a vigorous statement of the university case by Salomon, which was strongly reiterated by the secretary of state, and by the governor in his

[1] The short-sightedness of this policy receives emphatic comment from the experience of Cornell University. There being no public lands in the state of New York, Cornell received its endowment in the form of land scrip and a large share of its lands were located in the pine country of northern Wisconsin. Cornell held her lands until about 1885, and sold them at prices which netted her an annual income rather in excess of the total fund which Wisconsin realized from the sale of the entire agricultural grant.

annual message, the legislature of 1867 appropriated to the university the sum of $7,303.76 per annum for a period of ten years. This was the interest at seven per cent. upon the amount by which the university fund had been reduced through the erection of buildings and was equivalent to a restoration of that amount to the fund. By this act the legislature virtually acknowledged the responsibility of the state for the housing of the university. But the institution had now outgrown its old quarters and the next legislature was induced to appropriate $50,000 for the erection of a new building for the Female College. Two years later (1872), after carefully investigating the condition of the institution, the legislature levied an annual tax of $10,000, made directly available to the use of the board of regents for the maintenance of the university. Prepended to this act was a significant preamble explicitly declaring that the policy of the state government with respect to its educational lands, "although resulting in a general benefit to the whole state," had impaired the university's source of income and had therefore devolved upon the state a permanent responsibility for the support of the institution. The origination and passage of this act was to a large extent due to the efforts of an alumnus, John C. Spooner of the class of '64. At last, nearly a quarter of a century after its foundation, the university had been relieved from utter reliance on its national endowment and was placed in a position of financial dependency upon the state. The new appropriation augmented the annual income by nearly one-third, but more important than the immediate relief afforded by the act was the establishment of a precedent of far-reaching effect.

The first step toward the reconstitution of the teaching

force was to secure a president. Throughout the war period the university had been enfeebled by the absence of an executive of recognized authority. The routine tasks of a head officer had been acceptably performed by Sterling, and there were those who thought he should have been given the titular honor which went with his duties; but the board were evidently unwilling to confide the destinies of the institution permanently to his hands. Though it is hard to make out whence, at that period, the salary of such an officer was expected to come, the regents had begun, as early as 1865, the search for a chancellor and had offered the place to Josiah L. Pickard, then superintendent of the public schools of Chicago. Pickard, it will be remembered, had been a regent of the university during the closing years of Lathrop's administration and had been a member of the committee which secured the arrangement with Barnard. As superintendent of public instruction he had been associated with the board until 1864. His acquaintance with the affairs of the university did not lead him to look favorably upon the offer of the chancellorship. After the passage of the new act, he was tendered the presidency, but, although the board had expected a favorable reply, he again refused, having decided evidently that the prospects of the institution were still unpromising. The presidency was then offered to Paul A. Chadbourne, but he too declined after twice visiting the state, the second time with the expectation of accepting the place. Rather than suspend operations altogether, arrangements were hastily made to continue instruction in the university, for one year more (1866-67), substantially as it had been before.

Chadbourne's dissatisfaction with conditions at Wisconsin chiefly pertained to the clause of the organic law

which demanded that all departments of the university should be "open alike to male and female students." Upon representations from the regents to the effect that, unless this requirement were qualified, it would be "extremely difficult, if not impossible, to secure the services of a thoroughly competent and experienced educational man at the head of the institution," an amendment was secured in the next legislature, providing for the admission of women "under such regulations and restrictions as the Board of Regents" might deem "proper." This accommodation having been made, Paul Chadbourne was unanimously elected president of the university, June 22, 1867, and this time accepted. The salary agreed upon, three thousand dollars, was the largest the university had yet paid and compared favorably with similar compensations elsewhere.

It was an excellent appointment. The new president was not a deep scholar nor was he a great man of fixed and constant purpose; but he came of a good school and his capacities were of a sort to make him easily the man of the hour in this particular time and place. A graduate of Williams, class of 1848, Chadbourne had become, five years later, professor of Botany and Chemistry in the college and, not long after, of Natural History. This association lasted throughout the fifties, though he was seldom in residence during the entire college year. He had been connected with various other colleges as lecturer and in an executive capacity and had delivered courses of lectures, before the Smithsonian Institute on natural history, and on natural theology before the Lowell Institute, both of which were subsequently published. He had led a number of natural history expeditions in far regions and had traveled in Europe, had dabbled in politics and in business. He came to

Wisconsin direct from the presidency of the State Agricultural College at Amherst, a fact which, taken in connection with his scientific bent, peculiarly enhanced his acceptableness here, at the moment. After leaving Wisconsin he traveled for two years in the far west, partly for the sake of his health, partly to gratify scientific curiosity, and partly in the hope of using for his material advantage a supposed gift for recognizing metalliferous rocks. In 1872, he succeeded Mark Hopkins as president of Williams College. The controversial question of his success in this post does not concern us here. He held the Williams presidency for nine years. Toward the end of this term of service, he became involved in business enterprises and suffered sharp reverses. He died two years later (1883) and was interred in the college burying ground at Williamstown.

Physically, President Chadbourne was of an insignificant presence, which he redeemed by a fine head and eye and a confident manner. He was an accomplished popular orator and an effective class-room teacher. His mind was rather ample than profound, and his learning was of the same character, superficial, but exact and thorough as far as it went, and easily commanded. He was known to confess that he thought he could teach any subject in the curriculum better than it was generally taught, and he was probably right. When he sought a man for a professorship, he was not intimidated by a candidate's lack of special knowledge in the branch to be taught, if he thought him a good man, and he usually chose men who were comparatively young. His moral character was analogous to his intellectual constitution. In theology Chadbourne espoused, while still young, "extreme Calvinistic views, superficially taken up and very narrowly held." On one occasion, while at Madison, he

rose and left the church in the midst of a sermon, because of a skeptical reference to the Garden of Eden. Of the deepest problems of human life he was wont to say, "I settled all those questions when I was in the seminary." Yet a severe critic refers to him as "a warm-hearted Christian man." "He was an open and outspoken and agreeable man, . . . stirring and restless, fickleminded, ambitious of place and power, fond of money, overestimating his own abilities and the commercial worth of his services." The quotation is from one who knew him closely and was a keen analyst and frank recorder of human traits.[1] I continue from the same source. "Chadbourne early acquired and naturally improved by intercourse with all sorts of men in many climes, a good judgment of his fellowmen, of their salient tendencies and radical character. . . . His verdicts in general were charitable and correct. He made sharp and courageous distinctions between what he deemed right and wrong, clean and foul; but he did not distrust others until he saw firm reasons for distrusting them. . . . He was rather an optimist than a pessimist."

All that we can learn of Chadbourne, then, depicts him as a man of sanguine, active temper, facile and ready, possessed of considerable initiative and a wide acquaintance with men and affairs, but of no great depth or staying power. These are the outlines of a character more suited, on the whole, to gain popularity than to retain it; of a man better fitted to start an enterprise than to see it through. It is not difficult to understand, therefore, why, by those best qualified to judge, Chadbourne's connection with the University of Wisconsin has been regarded as a fortunate one. The

[1] Arthur L. Perry, Williamstown and Williams College.

period of his stay, barely three years, was too short for his superficies to wear thin, and it was sufficient to let his prompt and confident qualities perform a useful service in blocking out, boldly and without delay, the institution which was to be more solidly developed under Bascom a few years later.

The board after considerable maneuvering had decided to rest upon the new president the responsibility for the reconstitution of the faculty. At the time of Chadbourne's election the members of the old faculty were favored with the receipt of a formal resolution by the board in which they were pointedly tendered the board's appreciation of their past labors and "well wishes for their prosperity in the fields of labor to which they [might] be called." The president was asked to submit as soon as practicable, nominations for the various chairs. Read had resigned the preceding April to accept the presidency of the University of Missouri, and Butler had asked for leave of absence for the ensuing year. On June 25, Chadbourne nominated William F. Allen for the chair of Ancient Languages and History, John B. Parkinson to be professor of Mathematics and principal of the Preparatory Department, and Samuel Fallows, professor of Rhetoric and director of the Normal Department, and all three were elected. The two first entered upon their duties the following autumn. Fallows declined the appointment and his place was filled, for one year, by T. H. Haskell. He was followed by S. H. Carpenter, who had been a tutor in the university under Lathrop and had eked out Professor Read's last year. In June, 1869, Carpenter was permanently elected to the chair of Logic, Rhetoric, and English Literature. The remainder of the old faculty were continued in service, with the understand-

ing that their chairs would become formally vacant at the end of the year, 1867-68. There was a petition from the alumni and another from the students in favor of the retention of Sterling and a communication from citizens of Milwaukee in favor of Fuchs; but no immediate action was taken in these cases.

At a meeting of the board in February, 1868, there was brought about an important change of the precedent with respect to the appointment of members of the faculty. At this time the president nominated John B. Feuling for the chair of Modern Languages and Comparative Philology. Professor Fuchs was also a candidate for this position. It had been the practice of the board of regents to elect members of the faculty by majority ballot upon the several candidates for each chair. On the first ballot, according to this procedure, Fuchs and Feuling each received five votes. There being no choice, the meeting adjourned. The next day, February 14, 1868, after passing a vote of confidence in the president, the board resolved that, thereafter, votes should be taken, aye and no, upon the nominations of the president. The nomination of Feuling was then presented and he was elected with only one dissenting vote.

At the same meeting, there were elected, on nomination by the president, John E. Davies, professor of Chemistry and Natural History, William W. Daniells, professor of Agriculture, and Addison E. Verrill, Comparative Anatomy and Entomology. It was not until the following June that Sterling was elected to the chair of Natural Philosophy and Astronomy. To the group of men then brought together should be added R. D. Irving, who was one of Chadbourne's most distinguished appointments, though he did not join the faculty until

after Chadbourne had left. With the exception of Verrill, whose stay was brief, the group of men appointed to the central faculty under Chadbourne finished their lives in the service of the institution and were the backbone of the college for at least a decade.

The inauguration of departments and of new courses of study went forward briskly. During Chadbourne's first year, the project of a department of Law, which had fallen through ten years before, was revived and pushed to a successful issue. At first the amount of money which could be devoted to this object was only about two thousand dollars per annum. With this sum, however, members of the local bar, of requisite ability, could be induced to serve as regular instructors, while the justices of the Supreme Court gave, gratuitously for a number of years, supplementary courses of lectures. During the first year (1868-69) the law faculty, in addition to the three justices, Dixon, Cole, and Paine, consisted of J. H. Carpenter, dean and professor, and W. H. Vilas, '58, professor. The following year the faculty was enlarged by the appointment of H. S. Orton as dean, Carpenter and Vilas continuing as professors. For many years the "Law School" was quartered in downtown rooms and in the State Capitol and had little contact with the rest of the university. The course was for one year and, except that those who were not collegiate graduates must be twenty years of age, there were no admission requirements beyond "credentials of good moral character." After the first year the matriculation fee was five dollars and tuition ten dollars a term. Instruction was largely by lectures, with moot-court practice under direction of a professor-judge. The first class consisted of fifteen students of whom twelve were admitted to the bar; there were ninety-four grad-

uates in the first five years. For a considerable period the graduates in Law annually outnumbered those in all other departments of the university.

The technical departments that had been projected in connection with the new College of Arts were likewise promptly initiated, but their development was a much slower process. Scientific education was still in its infancy in this country; actual specialists in the technical applications of science to industry were difficult to find, and still more difficult to enlist in academic teaching, and students, at first, showed little inclination to embrace any opportunities which might be offered for a high degree of specialization looking toward a particular trade or profession.

To be sure, the new options presented by the general course offered in the College of Arts soon demonstrated their popularity. Although at first outlined as a three years' course, the general course prescribed in the College of Arts was extended, in 1869, to occupy four years. Its graduates immediately outnumbered those in the College of Letters. Indeed, an analysis of the attendance from 1869 to 1871, shows that there had been no substantial increase in the regular classical course since 1859-61, although, in the meantime, the general attendance had grown from less than two hundred to about five hundred students. The reason for this adduced by the regents, viz., "the growing demand for collegiate education in the direction of *scientific* studies," was not the only one. The popularity of the course in the College of Arts may be considerably accounted for, first, by its easier requirements for admission, and second, by the options it allowed of the substitution of modern languages and of studies in general and applied science for the ancient languages of the classical course. The shap-

ing of these more or less random courses was to be, as has been said, a relatively slow development.

All eyes were centered at first upon the department of Agriculture. The leading professorship in this department had proved a difficult one to fill, requiring, as it did, for the satisfactory discharge of its duties, a man of scientific training combined with practical experience. After a year and a half spent in the search, in course of which the position had been refused by ————————, a resident of the state, and the president had declared his intention of undertaking its duties himself until a suitable person could be found, a decision had been reached in February, 1868. William W. Daniells, who was then elected to the professorship of Agriculture, had been an instructor at Michigan Agricultural College, of which he was a graduate, and had studied at Lawrence Scientific School. In addition to a good scientific training, for the time, he had the usual country boy's familiarity with the processes of the farm, improved by intelligent observation and study. At the time of his appointment, he was in his twenty-eighth year.

The first work of the professor of Agriculture and Chemistry was pioneer labor, whether in fitting up a laboratory in the cellar of old Main Hall for the course in Analytical Chemistry, or fitting for the plow the virgin acres of the new experimental farm. The latter was the scene of much activity during the summer of 1868. Stumps and trees were cleared away; stones were hauled to the shore of the lake, beginning the line of bowlders which still serves as a breakwater along that exposure of the university campus. Ground was prepared for a vineyard on the south slope of Observatory Hill, and the northward slope, next to the lake, contain-

ing nearly ten acres, was plowed for an apple orchard. A substantial farm barn and a modest farmhouse were erected, fences were rearranged so as to throw all of the university property into one inclosure, and a system of drives and avenues was laid out and partly graded. In addition, the university grounds were considerably improved. The groves were cleaned up; dead limbs, stumps, and trees were "so far removed as to admit of the entire grounds being mowed, with the exception of that portion along the bank of the lake, which [was] left in the wild state for botanical purposes." Two hundred evergreens were set out upon the grounds; an arborvitæ hedge was planted "between the stiles in front of the University," and a row of Norway spruce along the south line of the farm. The clearing and fencing of the grounds, the planting of the vineyard and orchard and of evergreen screens along the avenues and borders, and the grading of the roads occupied the two following seasons, so that, by the end of President Chadbourne's three years, the system of grounds and drives, as far as University Bay, had taken on very much the arrangement which they retained until comparatively recent times.[1] A portion of this labor was performed by students, "at a maximum price of twelve and a half cents per hour." And the president himself had put his hand, if not to the plow, exactly, at least to the spade. A student orator, in bidding him farewell at his last commencement, sentimentally referred to the trees "which his own hand had planted" as fitting memorials of his influence. And, without a doubt, some of the splendid trees still flourishing in the glade east of Observatory Hill are among those referred to.

In the meantime all of the ground west of University

Hall had been surveyed and platted, for purposes of record, into acre lots, and an effort was made, by variations in planting, to give the character of experimental, or model operations to all enterprises upon university land. From the first a few experiments were carried on in the planting of farm crops. Eight plats of potatoes and four acres of corn were under observation the first year. The corn project was defeated by heavy rains; but the other experiment, favored by the virgin soil, was completed and recorded. Though inconclusive in most particulars, the experiment established two facts in regard to potato culture, first, that hand picking of potato beetles, if persistently followed up, is effective; and second, that persistence in this process is expensive. But it should not be lightly inferred that the experiments of these early years, inevitably of limited scope and empirical in character, were trivial or useless. They had to do with the merits of different varieties, the choice and treatment of seeds, the advantages of different methods of planting and cultivation, the destruction of pests, the virtue of fertilizers, relative profits among such staple crops as corn, potatoes, wheat, oats, barley, and grass; and the experiments gradually became more varied, systematic, and exact. In the opinion of Dean Henry the signal achievement of the experimental farm, under Daniells' régime, was the discovery, development, and demonstration of the remarkable qualities of Manchurian barley and its dissemination throughout the state and the Northwest. With the year 1869, there being no branch of the U. S. Signal Service nearer than Milwaukee, the experimental farm undertook the systematic observation of meteorological conditions. The continuous local weather record dates from that time. Enough has been said to show that the professor of Agri-

culture had no sinecure. In his odd moments he performed the service of analytical chemist for inquisitive persons throughout the state, and he was expected to give university instruction in advanced Chemistry, Economic Botany, and Practical Agriculture.

It is perhaps not remarkable that the technical course in Agriculture was among the slowest to show vitality, notwithstanding the fact that no subject had been more emphasized in the reorganization of the university. The catalogue immediately devoted lavish space to the announcements of the department, including full outlines of a systematic course of study leading to a special degree; but as late as 1880, the board of visitors, with unmistakable point, reported themselves as "finding no students in, and learning of no graduates from the agricultural department." This slander has been so often repeated that it should be corrected. There *was* a student of agriculture in the university for two consecutive years, William West Brown, of Merton, Waukesha County, who graduated Bachelor of Agriculture in 1878, and rose, ten years later, to be postmaster of his native village. From 1868 until 1873, elective courses were announced in such subjects as Practical Botany and Agriculture, History of Useful Plants, Climatology, Horticulture, Examination of Soils, Forestry, Natural History of Domestic Animals, Entomology; but few of these courses were actually offered or taken, and the rigorous candor of Bascom's editorship soon abridged the literature pertaining to them. Agriculture and Meteorology, previously elective, appears as a prescribed five-hour study for sophomores in the College of Arts, for one term (1871-72), and Agriculture as a two-hour study the following year. Thereafter, such studies, even as options, were relegated to the junior and senior years of the

special course in Agriculture, in which, as we have just noticed, there was but one student in ten years.

The failure of Agriculture as a college study, during these years, may doubtless be attributed, in large measure, to general conditions; but the failure was also, in some degree, a personal one. The talents of the professor of Agriculture were not such as would be likely to procure him a striking success in the introduction of a new and untried subject of study. Daniells was a kind and lovable man, conscientious and diligent, and a sound analytical chemist who readily won the regard of those students who came in close contact with him in the laboratory. He is justly revered as one of the group of sincere scholars who placed the teaching of science in the university upon a solid basis. He was, however, a plodding thinker, of no discursive liveliness, and was a confused and absent-minded lecturer. His audience was composed largely of aspiring youths who had come directly from the farm to the classroom, not to hear "wise talk of the kind of weather," but to be wafted by glorious spirits into the arena of Science. This last condition might have been a favorable one in the case of a brilliant lecturer who possessed the faculty of illuminating familiar processes through the elucidation of occult principles; but this was exactly the gift in which the professor of Agriculture was deficient.

The mention of Daniells ought not, however, to end in a negative; he was a force in the university in these formative years and belonged to that positive and constructive group in the faculty who worked earnestly and intelligently toward better and better things.

What has been said of Daniells applies, except for this last point, and change of emphasis, to Davies, who shared with him the teaching of the branches which most readily

admitted of application to agriculture. In both cases the fiction was soon abandoned of any close application of their teachings to practical agriculture and the energies of each were eventually absorbed into the general science teaching of the college, Daniells being largely occupied with the work in Chemistry and Davies with that in Physics. The real beginnings of agricultural education at Wisconsin date from the middle of Bascom's administration and were brought about by new pressures and new men.

The technical courses of Engineering in the university had their origin in two separate forces, one the military department, the other the personal influence of Roland D. Irving. The course in Civil Engineering "as a Department of the College of Arts, on the same footing in all respects with the Agricultural Course" was formally established by the board of regents in June, 1870, and the department of Mining and Metallurgy was similarly created exactly a year later.

The national military academy at West Point was still the chief school in this country for the training of engineers. It was, therefore, natural that the regents should see in the detail of an army officer, provided for by the Morrill Act, an opportunity to establish, without expense for instruction, the long projected engineering course. At first conception, the course in Civil Engineering was rather closely incorporated with the required military training of the university. Under the first commandant, Col. W. R. Pease (1867-69), who bore the title of Professor of Military Engineering and Tactics, a four years' course was laid out, wherein Military Science was introduced into the junior, and Civil Engineering into the senior year. It was elective for students who were proficient in the higher mathematics. The

course was definitely thought of as a school for officers,—its main outlines, no doubt, suggested by the West Point plan. It was soon perceived, however, that in compliance with the requirements of the Morrill Act, more weight had been given to the military idea, throughout the university, than the traffic would bear. Legislation was secured which enabled the regents to confine the requirement of military drill to the freshman and sophomore years. Soon afterward, the course in Civil Engineering was established as an independent department. Under Col. Walter S. Franklin (1869-70) an outline of engineering studies occupying the junior and senior years was definitely set forth and work was actually started, two students, who began at this time, finishing with the degree in course under Major Nicodemus, in 1871. But their experience with the two preceding commandants had convinced the regents that, so long as it remained dependent upon army detail, permanency could not be secured in this department. Accordingly, Major Wm. J. L. Nicodemus, who retired from the army before coming to Wisconsin, was in January, 1871, elected to the professorship of Military Science and Civil Engineering on the same terms, as to tenure and salary, as other members of the faculty. He proved energetic and competent and immediately organized a full course of study in Civil Engineering, covering the junior and senior years of the College of Arts. The autumn of 1872 found five students enrolled in the new course, of whom three, the first regular class in engineering, graduated in 1873; one transferred to law, while one, Allan D. Conover, who succeeded to the professorship upon the death of Nicodemus, five years afterward, graduated in 1874. The hard times which now prevailed and especially the disorganization of industry through the panic of '73 doubt-

less retarded the growth of the department, but hereafter there was no year without its small complement of students in engineering.

Irving, more signally than any other of Chadbourne's appointees, among whom he was the youngest and the most exceptional, belonged to the new era. His service, less long than illustrious, falls mainly within the limits of the next chapter; but the beginnings of his influence were felt in the formative period with which we are now concerned. Only twenty-three years of age when he joined the faculty, he had already completed three years of graduate study in the new School of Mines, at Columbia University, and had followed them with a year of practical work. At his demand, a laboratory, the most adequate the university had yet seen, was fitted up in the north basement of University Hall, and he began instruction at the opening of the winter term, December 7, 1870. The department of Mining and Metallurgy was established the following June. Two students joined this course the following autumn and were carried on for an additional year of advanced work, though the distinctive degree of this department was first conferred in 1876. Irving was seldom without advanced students, usually few, usually able, and some of them went far. His work, whether in teaching or research, had a firmness of quality,—enthusiastically arduous, confidently competent, yet totally devoid of pretentiousness,—which was serviceable to the whole institution. Irving's powerful work on the scientific side was balanced, in behalf of the humanities, by the substantial and distinguished work of W. F. Allen in Latin and History which would call for more extended notice here, were it not reserved for mention in another connection.

It was due in large part to the effectiveness of its faculty that the university was carried without loss of momentum through the administrative vicissitudes of the early seventies. After Chadbourne left, the routine of administration remained for a year in the ever-faithful hands of Professor Sterling, when the regents called to the presidency Dr. John H. Twombly of Massachusetts. They congratulated themselves that they had placed at the head of the university a man who was above all, "eminently practical." The evidence of this quality lay in Dr. Twombly's previous success as a money-raiser for educational enterprises in the East. Unfortunately it was soon apparent that his personal qualities were not of a cast to afford him anything beyond official influence over the faculty. The new president proved to be a large-boned evangelical of a pushing type, of insignificant scholarship, and without social delicacy. His authority was resented by the faculty in a mixture of humorous amusement and irritation. He has been off-handedly characterized by one of them as "the biggest humbug that ever struck the institution." This is a trifle reckless. Dr. Twombly seems to have been a sincere man of much religious and denominational zeal, strong practical energy, and slight culture. He was a "humbug" only in the sense that he was, according to faculty standards, educationally meretricious. The regents soon awoke to their mistake, but it was not until January, 1874, after a contest with certain denominational forces in the state had afforded them a bitter proof of his "practical" abilities, that they succeeded in securing his resignation. The period between Chadbourne's departure and the arrival of Bascom may be regarded, then, as an administrative hiatus. Yet the institution did not stand still. The wise favor of the state officers

and the youthful spirits and courage of the faculty, each member of which was alive and aggressive for his department, kept things on the move. It was a very animated group of young teachers to which Bascom came in the spring of 1874.

Coeducation was an issue throughout these years. Public opinion was probably represented fairly in the original provision of the reorganization act, that all departments of the university should be "open alike to male and female students." At the beginning, sentiment on the subject was chiefly concerned with securing to the women equivalent opportunities with the men, and no serious obstacle had been raised against the modification of the law upon which Chadbourne had conditioned his acceptance. But year by year, as the scholarship of the women took a higher range, the feeling increased that their privileges would never be equal to those of men unless they were admitted without distinction to the same exercises and placed in all particulars on the same footing. So long as women recited separately and were admitted on sufferance to university lectures, though their privileges were nominally the same, practically they were not. Thus a sentiment developed which grew each year more lively, particularly among the university women themselves, in favor of their right to enjoy not only equivalent privileges with the men, but the same privileges and in company with them. This more or less abstract sentiment, which had nevertheless a practical basis, combined with economic necessity to bring about, in the end, complete coeducation, and, down to the present day, has defeated all projects of enforced segregation, except in purely social concerns.

During Chadbourne's first year the style of the

woman's division of the university was changed from "Normal Department" to "Female College." The statement sometimes made, that Chadbourne "prescribed for them an inferior three years' course of study" is, however, false. As a matter of fact, the course of study was at once revised and extended to occupy four years. One is capable of suspecting, nevertheless, that not only the adoption of the obtrusively unambiguous style (already resented by many of those so distinguished as a mark of obloquy), but likewise the extension of the course was a part of Chadbourne's programme for taking care of the women within their own precinct and thus protecting the integrity of the university proper (that is to say, *male*), against intrusions by the opposite sex. The separateness of the two institutions was accentuated by such trivial, and illogical, expedients as that of printing the names of the women students in a separate part of the catalogue from the rest of the university, a practice which was out of harmony with the arrangement of the catalogue in other particulars. And when, in 1869, on resolution of the board of regents, the degrees for women were made "the same as those conferred upon male students, provided the same courses of study [were] satisfactorily completed," and the degree of Ph.B. was conferred upon six women, they were granted the special privilege of independent graduation exercises on the afternoon before Commencement.

After Chadbourne's departure, the restrictions imposed by his authority rapidly broke down. Women were at once admitted as a matter of convenience to some of the recitations, and this state of affairs was legalized by the regents at their January meeting. Coeducation was warmly discussed in all quarters, throughout this year: by the students in their debating societies

"LADIES HALL" (1871)

and in the columns of the *University Press;* by the board of visitors in their annual report; by the faculty and regents. Shortly after the arrival of President Twombly, a joint conference of faculty and regents met at his house to discuss the question. Popular interest was now actively aroused in favor of complete coeducation. At the dedication of the new Ladies Hall, December 20, 1871, the feeling ran entirely in this direction; Governor Fairchild's sentiment, "regardless of sex, may the best scholar win!" was greeted with applause. The board of visitors had, this year, gone so far as to recommend the abolition of the Female College; but the regents were not yet prepared to take this step, preferring to follow "a conservative course, midway between the theories of those who would ride a hobby to personal popularity and that of fogyism which yields nothing to the demands of a growing public opinion."

Evidently, by this time, in Wisconsin at least, there was no martyrdom involved in championing the cause of coeducation. For the year 1871-72, the course of study in the Female College was made "the same as that of the College of Arts," with the substitutions allowed of Rhetoric and English Literature for Agriculture, Meteorology, and Calculus, of German Literature for Analytical Chemistry, and of Chaucer for Mineralogy, in the sophomore, junior, and senior years, respectively. The year following, five women were classified in the regular courses of the College of Letters and, the year after that, the Female College, as a scholastic division of the university entirely disappeared. Bascom's second *Report* announced that the young women had been put, during the past year (1874-75), "in all respects on precisely the same footing in the university with the young men." Students were now classified according to their courses

of study, regardless of sex; men and women appeared together upon the Commencement programme; and the "Lewis prize" for the best Commencement essay, now first awarded, was won by Fannie West of the class of '75. So spoils crowned the victory.

VIII

JOHN BASCOM

So far the university had made its way amid a jostle of influences not so much inhospitable as incoherent. The ferment of public opinion which in times of maladjustment had taken the character of animosity was, after all, more favorable than indifference to the ultimate success of the institution. As an instrument of general culture, the people had been slow to accept the university; as a mere rival of the sectarian college, they had even bitterly resented it. They were not very clear as to what they wanted; but they knew they wanted something different and new, something responsive to their need, something which they called "practical." And though this might be meant by many in a low and a narrow sense, many were prepared to embrace it in a broader, higher one, provided it could be shown to them, not as a theory, or a sham, but as a fact. The time was ripe for an individual of power who, infusing intensity and distinction into the academic temper of the institution, might simultaneously and by that very act, clarify the popular will and transfuse it with purer hopes. John Bascom proved to be the appointed spirit.

It is conceivable that this work could have been accomplished by a mighty administrator, or by a magnetic leader of men, or by a transcendent scholar. Bascom was none of these. He was, however, a great man, and he was, preëminently, "a great teacher." And this is the significance of the Bascom legend. The progress of the

university during this period lies primarily in the province of the teacher. It is mainly from this angle that the history of the ensuing decade and a half deserves consideration. It is mainly for this reason that the period is central to the whole cycle of the university's evolution.

On the same day (January 21, 1874) that the regents had painfully wrung from President Twombly his letter of resignation, they unanimously elected as his successor, Professor John Bascom of Williams College. This appointment may be said to have crowned the series of Paul Chadbourne's nominations to the Wisconsin faculty. In anticipation of the vacancy, Regent Hamilton H. Gray had been sent on a scouting expedition to the East and, in the course of it, had interviewed Chadbourne, now president of Williams College. Chadbourne recommended Bascom. It has been intimated, in print, that the former may not have been sorry to be relieved of a difficult element in his own faculty. Bascom could not be considered negligible when the question arose as to who should follow Mark Hopkins in the Williams presidency. But to his candidacy, his want of sympathy with the Hopkins philosophic tradition was an even more serious obstacle than his undisguised departure from strict theological orthodoxy, a peculiarity wherein he differed radically, both from Chadbourne and from President Hopkins, who practically named his own successor. Bascom's formidableness from Chadbourne's point of view may be divined from the oft-repeated remark of a member of the Williams faculty, when approached by President Hopkins on the subject of the succession, that "John Bascom could put twenty Chadbournes in his breeches pocket and walk off and not know it." But if an imputation of motives concerns us at all, it is far pleasanter and equally warrantable to see

in Chadbourne's recommending of Bascom at once an act of magnanimity toward a rival and a lingering interest in the welfare of the institution he had recently served, upon which, as time would demonstrate, he now conferred a last and a lasting benefit. The consciousness that his advanced opinions were making his position at Williams increasingly difficult made Bascom the more willing to accept the new outlet for his energies.

President Bascom was elected on the understanding that his duties should begin with the autumn term of 1874; but recognizing an exigency, he secured his release from Williams and without waiting to transfer his family, came on alone in the early spring, took up his residence for the time being with Professor Sterling at the foot of the campus, and immediately "put his hand to the plow." Thus the class of 1874 was the first of fourteen who, as seniors, enjoyed his instruction in the classroom and listened to his parting admonitions at Commencement. The class of '90 was the last, as freshmen, to be aware of his living presence "on the hill."

Contemporary records indicate that the first impressions of Bascom were favorable but not enthusiastic. His reputation as a writer and teacher had preceded him and commanded respect, and he was seen at once to be competent. He was not one to inspire immediately, nor ever, save in an intimate few, a warm personal attachment. Bascom's influence lay chiefly in another region than that of the personal affections. When it is said, therefore, that he came to wield an unprecedented personal influence, this should not be confounded with popularity. As to his amiability there will be found much difference of opinion; very little as to his effectiveness. An influence so important and of a character so

unusual suggests the propriety of rather full information concerning the man who wielded it.

John Bascom was born in 1827, by chance in Genoa, New York, for his ancestors on both sides had been New England Puritans, many of them clergymen and men of a very positive temper. He was "the son of a minister, the youngest child, the only son, and the son of a widow." His early surroundings were those of rustic poverty. The second of three sisters, a woman of uncommon force and ambition, "brought the family through the wilderness," provided the opportunities of early education, and furnished the means for his four years at the college of his father and uncles. Perry of Williams, who was with him in college and later his most intimate friend, has left this careful picture of Bascom as a college student:

"Six feet tall, as straight as an arrow, with sandy hair and complexion, a pronounced Roman nose springing from between eyes always bright though usually quiet, the whole countenance and bearing, whether on the wicket-field or in the recitation room, indicating a restful self-possession and an easy mastery over all that belonged to him, with a corresponding indisposition to meddle with anything that belonged to anybody else. He seemed to claim nothing from anybody, while manifesting indirectly an unmistakable purpose to defend all that was his own. . . . His face in college and ever afterward indicated a remarkable purity as well as elevation of thought."

Besides its wealth of physical detail, this passage is valuable for its notice of a striking quality of Bascom's bearing which characterized him in mature life. Though distinct from coldness, those who knew him less than very well easily mistook it for that. Bascom may have been coming at the same characteristic, from within, when

he wrote at the end of life, "Though possessed of independent and uncompromising moral convictions, I have always been exceedingly shy, and have suffered deeply from every form of personal collision." And this, of religious intercourse, has a similar bearing: "When one has shut the door into one's own mind, it must remain shut till one chooses to open it again. . . . The most impenetrable region, the most complete retirement, are those of individual, spiritual life."

Intellectually, Bascom most astonished his college competitors through his masterful handling of the mathematics and, later, by a similar gift for abstract speculation. By his own account, he was an indifferent student of languages, a fact which he attributed, first, to a poor memory for words and imperfect natural sensibility to their connotation, and second, to bad teaching. He loved nature and, during his college days, formed a permanent attachment for mountainous scenery. Nature, especially the mountains, was his chief source of refreshment through life. Though he did not despise the recreation to be found in human society, he confessed that contact with men tended to weary him. In his character, a principle of intense personal ambition was met and poised by an equivalent capacity for sacrifice. He was in conduct unspotted and he was deeply religious. Such a character might be wrong-headed at times; it could hardly be wrong-minded. By no single gift of intellect or attribute of character, nor by either singly, but rather by a communication of height and power Bascom produced an extraordinary impression on his early fellows. Of this impression, Perry wrote:

"Not only was there no other in his class could stand any sustained comparison with him in silent power and positive influence, but there was no student in college

during his time who could do this, and it may be fairly questioned if there were ever a student here maintaining during four years such an easy and acknowledged supremacy in all good things above all his compeers."

Most outside and many inner forces impelled young Bascom to the ministry; but his native disposition to resist encroachments upon his voluntary possession of self led him, at first, to seek his career in the law. It required but eight months in a lawyer's office to convince him that the pragmatism of this profession was too much of the earth to invite his soul, and he yielded to the ancestral call. At Auburn Theological Seminary he came under the teaching of L. P. Hickok, to whom he considered himself "more indebted than to any other instructor." He had sat under Mark Hopkins at Williams; but there had been too little speculative daring in that teaching, and too indolent an explorativeness of scholarship to permanently interest him. Hickok introduced him to the higher ranges of speculative philosophy. This teacher was an uncompromising intuitionalist, conversant with German transcendental thought. An interest in science and the empirical philosophy related to it soon led Bascom to modify his acceptance of Hickok's teaching and started him upon the philosophical quest of his life, viz., the reconciliation of these two forms of thought. He finished his theological training at Andover six years after leaving college, having meanwhile, besides the time given to law, spent one year in academy teaching and parts of two years as a tutor at Williams. Through an obstinate attempt to offset his insecurity in the classical tongues by an absolute mastery of Hebrew, he had permanently injured his eyes. This calamity undoubtedly curbed in some measure the impetuosity of his outward ambitions and tended to confirm the reflec-

tive bent and the devotional strain already so strong in him. At this point he accepted, with much misgiving, the professorship of Rhetoric and Oratory at his old college.

At the time he enters our history Bascom was approaching forty-seven years of age and had spent nineteen years in the position just mentioned. It was not the field in which he would have chosen to teach; almost any other would have been more directly in the line of his special strength and preparation. Traditionally, the work of this department involved almost exclusively the overlooking (in both senses) of the immature efforts of college students in writing and oratory. Bascom contrived, in course of time, to make himself felt in it. He introduced the study of Æsthetics and of English Literature and he undertook to import some philosophy into all the subjects taught. His first book, curiously enough, had been a brief textbook on Political Economy. This had been followed at intervals of three years by two books directly related to his teaching, an *Æsthetics* and a *Philosophy of Rhetoric*. Simultaneously his interest in philosophy continued. Numerous articles and reviews published during these years were all outside the field of his teaching, and most of them were on subjects that foreshadowed his book on *The Principles of Psychology*, published in 1869. Two years later, a series of lectures at the Lowell Institute was brought out in a volume called *Science, Philosophy and Religion*. A second series of lectures at the Lowell Institute produced the volume entitled, *Philosophy of English Literature*, published the year he came to Wisconsin. It may be regarded as his farewell to the subject. This book contains some large views and interesting comment; but its sympathies are embarrassed by puritanical boundaries

and, on the whole, the historian and the *litterateur* are freely swallowed by the moralist. The concluding chapter is appropriated to a review of English formal philosophy from Hobbes to Spencer. After reading this book, no one can be in doubt that the change in the field of his teaching was to Bascom a welcome feature of his transfer to Wisconsin.

During the thirteen years at Wisconsin, Bascom published eight books at intervals of about two years, except that from 1878 to 1881, inclusive, he brought out a book a year. Of these publications, *Ethics, Natural Theology,* and *Science of Mind,* a revision of the earlier *Psychology,* were intended for textbooks, and arose directly out of his teaching. *A Philosophy of Religion, Growth and Grades of Intelligence,* and *Problems of Philosophy* were elaborations of special points in his philosophy. *The Words of Christ* aimed to disclose "the overwhelming rational element in the instructions of our Lord." *Sociology* (1887) indicated the direction in which his application of philosophy and ethics was swinging toward the end of his stay at Wisconsin. During the same period he produced a large number of sermons, addresses, and articles on religious, philosophical, educational, and sociological topics. That this, the section of his life which was most crowded with administrative duties, was also that of most prolific authorship is a reminder that Bascom brought to Wisconsin the central strength of his maturity.

About the time Bascom left Wisconsin the chair of Philosophy at Williams became vacant, but he was not elected. After leaving Wisconsin, he returned to Williamstown, however, and there continued his work as a teacher, at first as a special lecturer, later as a member of the faculty. His productiveness continued with little

sign of abatement for upwards of a dozen years, each biennium having a new volume to show. Even after the books became less frequent, the flood of articles continued to the end of his life. His death (October 2, 1911) was followed by two posthumous volumes, a collection of *Sermons and Addresses* (1913) and an autobiography, *Things Learned by Living* (1913).

Bascom's writings, though not without interest in themselves, are chiefly of interest as measures of the man. He wrote too much and too broadly, in too many fields, to gain the reward of finality in any. Few of his books enjoyed a wide circulation; they had their influence in a special limited group, not of specialists, but of advanced thinkers. Above all, they were indicative of his range and variety of interests, the intensity of his convictions, and the abounding energy of his mind. Admirers of the man seem to have been somewhat disappointed, always, in his books. Though he wrote so much, his gifts were not primarily literary. Character, action, even speech conveyed him more satisfactorily than the written word. There is little liveliness or warmth in his writing. The reader is chilled by a speculative matter-of-factness in dealing with human relations and activities which customarily inspire some color of sentiment or humor. It is a quality more due to intellectual detachment and singleness of purpose possibly, than to a fundamental want of human kindness; but the reader accustomed to the more genial habit of general literature is unlikely to make this allowance.

Nor was this, quite, a limitation of the writer only; the same quality of detachment was felt by many in personal dealings with the man. It was doubtless one point in his greatness and one secret of his impressive-

ness; it was, also, a source of some of his difficulties. Men of affairs whose sense of life was largely instinctive, empirical, and personal, were apt to feel him unsympathetic and set him down for a "crank." His curt, incisive statement of principles, correlative flashings of a thoughtfulness beyond their range, seemed dogmatic; his bare and sinewy programmes of action appeared impatient and arbitrary; his inflexibility, where moral issues cut counter to the expedient or politic, struck them as self-righteous and obstinate. With such men, he frequently found difficulty in working on terms of good understanding. To those who understood him, however, these discomforts were hardly even the defects of his qualities; they were a part of the stimulating contact with a mind and nature of singular sweep, unselfishness, and candor.

Throughout Bascom's large volume of writing, two increasing purposes run: first, for the individual, a reconciliation of evolution with the essentials of religious belief, making rational knowledge the means of a larger faith and a closer walk with God; second, the pushing home of speculative ethics toward applications to the actual problems of society and government. In neither field of thought would professionals credit him with absolute creative originality. His fruitfulness for the world lay not in his discoveries as a thinker, but in his influence as a teacher and a leader of teachers. And even here his influence was rather massive than specific; he lifted the ethical and philosophic temper of a generation of students, but he produced no scholars in his particular subject, in the sense that Allen produced a Turner and Irving a Van Hise. Yet his scholarship was sufficiently near the creative level to elevate greatly the plane of his teaching and intensify the vitality of his

leadership. Loftiness of contemplation, freedom and fecundity of thought, definiteness of conviction and resoluteness of purpose, seriousness and courage, both intellectual and ethical, stamp his work as that of no mere carpenter of textbooks or peddler of popular dogmas.

Bascom may be described, by way of summary, as in doctrine a philosophical progressive and in action a practical idealist. In the universal Law of Growth his philosophy found its final resolvent, that satisfaction of the spirit for which the individual yearns, that trend toward ultimate perfection and abstract justice by which society prospers. He was a practical idealist because he united in himself, in an uncommon degree and equalness of force, love and comprehension of truth and the will and capacity to make the truth prevail. Though by no means a faultless leader, he had this great quality of prophetic leadership, that his vision of the goal did not unnerve the immediate step, nor did concern for the immediate step blear his vision of the far-off event.

Despite his progressiveness and practicality, we seem to see here a man too remote in doctrine and austere of spirit to become the prophet of a materialistic western commonwealth of the eighties; but this, to the credit of both, he in fact became, not by direct and popular, but by indirect and non-popular influence. Indeed, Bascom never found, before or after, so free and ample scope for his range of talents as the Wisconsin presidency. It fell in the central working period of his life and it called out his whole personal force. That he himself should have been almost as conscious of the obstacles encountered as of the success achieved, was natural; that his success should have been unqualified and every-

where recognized, was hardly to be expected; but it is now fully recognized. And if his service to Wisconsin was great, his reward is great also, since what he there accomplished seems likely to prove his most substantial claim to be remembered in his generation.

OLD LIBRARY HALL

IX

GROWING UP

BEFORE undertaking to describe in detail the progress of the university during Bascom's administration it may be well to indicate in such brief terms as space will permit, the general progress of the state up to and during this time. Wisconsin when Bascom came to it still retained many of the pioneer characteristics that have been ascribed to it in a previous chapter; but it was beginning to outgrow them and it outgrew them very rapidly toward the end of Bascom's stay. During the earlier years, the state, in common with the whole country, suffered from the business depression which followed the panic of 1873. With the resumption of specie payments in 1879, there was a marked revival in the business world, and the succeeding era of industrial expansion rapidly modified the character of the state and without doubt influenced considerably the development of the university.

Generally speaking the material progress of the state was relatively slow in the seventies, but accelerated swiftly in the decade that followed. Population had reached the million mark in 1870, representing a gain for the preceeding ten years of about thirty-six per cent., for the rapid flow of immigration in the years just preceding the Civil War had brought the population of the state to over three-quarters of a million by 1860. The gain from 1870 to 1880 was less than twenty-five per cent. and of this gain two-thirds belonged to the first half of

the decade. The change from 1880 to 1890 was not strikingly different as to pace, but it was different in character, for, while the total population increased but a little more than one-fourth, the urban population doubled. Thus by 1890, Wisconsin had a population of well over a million and a half, of which one-fourth were town and city dwellers. Per capita wealth had trebled in the thirty years since 1860. Ranking fourteenth among the states in respect to population Wisconsin was now twelfth in the estimated value of its property. The material wealth of the state from forty-two millions in 1850, had multiplied seven times by 1860, and had nearly doubled again by 1870; had increased sixty per cent. between 1870 and 1880 and in an equal ratio between 1880 and 1890. The absolute increase in this decade was six hundred millions, almost as much as the entire wealth of the state in 1870.

Another criterion of economic development may be found in the growth of manufactures. The nine millions of annual production in 1850 had trebled by 1860, nearly trebled again by 1870, and nearly doubled again, reaching one hundred twenty-eight millions, by 1880; during the next decade there was an increase of one hundred and twenty millions, bringing the total annual value of manufactured products, in 1890, to two hundred and forty-eight millions. To appreciate the activity involved, however, it is necessary to remember both the high relative value of manufactured products in the earlier periods, and the fact that most of these products were not far removed from the raw state,—lumber, flour, leather, and the like. For every dollar of capital invested in manufacture in 1850 there was nearly three dollars' worth of production, while in 1890, this relation was almost dollar for dollar. The ratio of capital in-

vested in manufacture to the total valuation of the state changed very little between 1870 and 1880: one in sixteen and seven-tenths against one in fifteen and four-tenths; but between 1880 and 1890 there was a striking advance to one in seven and four-tenths. Similarly the proportion of hands employed in manufactures to the total population of the state changed only from one in twenty-four in 1870 to one in twenty-three in 1880; while by 1890 the proportion had risen to one in twelve and a fraction.

Lest the industrial significance of these figures be misunderstood, it should be noted again that some important items included in the totals relate still to but slightly manufactured products. Particularly during the eighties, Wisconsin was recklessly cashing in her forests, crowding Michigan close for first rank among the lumber states of the country and leaving all other competitors far behind. By 1890, the annual output of lumber and allied products was valued at eighty-four millions, one-third of the total manufactures of the state. The brewing of malt liquors from under two millions in 1870, and over six millions in 1880, was close to seventeen millions in 1890. Flour and allied products, on the other hand, had actually decreased from nearly twenty-eight, in 1880, to a little over twenty-four millions in 1890. The factory manufacture of dairy products was beginning to develop, increasing in the decade 1880 to 1890 from about a million and a half to about seven millions. The development of the dairy industry, together with improved facilities for transportation and the increase in value of the cheap farm lands which had been taken up by the early settlers, rapidly augmented the prosperity of the agricultural class and the country towns. Foreigners of the second generation began to straggle into

the university, slowly during the seventies but in increasing proportions in the course of the eighties. In the meantime the demand for farm labor, but still more the manufacturing industries of Milwaukee and other cities and the lumbering and mining industries of northern Wisconsin, invited new waves of immigration. In the course of the eighties a pronounced social stratification made its appearance.

Numerous factors directly related to the university, combined with the general conditions just indicated, balance the dozen and one years under Bascom quite definitely in two periods of almost equal length, with the year 1879-80 as a fulcrum or turning-point. It required about six years of frugal preparation and quiet readjustment to establish the institution on its new basis and to enable the president to make himself fully felt; certain fundamental problems were solved or put in the way of solution, and there followed, during the remaining years, a slow but solid advance which soon after quickened into the swift development of the nineties. During the earlier period, a more liberal income was secured, together with three new buildings and numerous other improvements in material equipment; the question of coeducation was given its quietus; the deportment of the student body was raised to a more dignified plane; the course in law was amplified from one year to two; coöperation with the graded schools of the state was strengthened through the granting of the state teachers' certificate to graduates of the university and, more directly, by the inauguration of the system of accredited high schools; the preparatory department of the university was discontinued, and the standard of scholarship improved. Most of these achievements became effective about 1879-80, and the same period was signalized by

changes in the personnel of the board of regents and by many important changes in the make-up of the faculty. What we are accustomed to think of as the university of John Bascom was by this time in full swing.

The year Bascom took the reins at Wisconsin the total budget of the university was a little less than sixty thousand dollars, of which slightly more than half was for salaries of the instructional force. The chief sums out of which this expenditure was met were the incomes of the two land funds amounting to about thirty-four thousand dollars, the two state appropriations of 1867 and 1872 amounting to something over seventeen thousand, and about nine thousand dollars in student fees for tuition and room rent. The president immediately urged the need of "a larger and more elastic income," and, as the ten-year grant of 1867 was about to expire, the legislature of 1876 commuted the two previous levies to "a tax of one-tenth mill on each dollar of the assessed valuation of the taxable property of the state." This increased the annual income about seventy-five per cent. It was anticipated, moreover, that a ratio tax, increasing with the growing wealth of the state, would automatically provide for a proportionate expansion of the university. As a matter of fact, this feature of the levy proved an insufficient measure. In seven years, the income from this source increased about three thousand dollars,—a difference more than offset by the shrinking of the income from the productive funds on account of falling interest rates, to say nothing of a substantial loss in student tuitions through a subsidiary provision of the law.

To meet this situation, the legislature of 1883 (first biennial session), changed the rate of taxation from one-tenth to one-eighth of a mill. On the assessed valuation

of 1877 the one-tenth mill tax produced $42,359.62, increasing the direct support of the university by about twenty-five thousand dollars. The first application of the one-eighth mill rate (1884) realized $57,442.52, an increase of about twelve thousand dollars over the preceding year. There was added, in 1885, a special appropriation of five thousand a year for the support of farmers' institutes, and this sum proving inadequate, two years later the appropriation was raised to twelve thousand dollars. The total receipts of the university in Bascom's last year, exclusive of the building funds, amounted to $113,601.87, of which the chief parcels were, sixty-two thousand dollars derived from the mill tax, thirteen thousand from the appropriations for farmers' institutes, not quite twenty-eight thousand from the productive funds, and about eleven thousand dollars from students' tuitions, laboratory charges and the like. Although the absolute increase between 1874 and 1887 had been an insignificant one in the light of modern expenditures, it will be seen that the sum annually available for the maintenance of the university had nearly doubled in the thirteen years, a rate of progress not greatly out of proportion with the economic development of the state.

The expenditure for salaries of the instructional force exactly doubled during this period, amounting in 1886-87 to not quite sixty thousand dollars, an average salary for the entire faculty of $1461 a year. The scale of salaries continued unchanged throughout Bascom's régime, the normal salary of a full professor remaining where it had been set in 1872, at two thousand dollars, which was exactly the salary paid by Williams College when Bascom left it. The increased expenditure was due entirely, therefore, to an increase in the number of the faculty, not to an advance in their salaries. Since the

absolute number of students in attendance was but little greater at the end than at the beginning, it follows that the improvement and diversification of instruction had greatly increased its *per capita* cost. To be exact, the increase was from $74.50 in 1874 to $111.17 in 1886.[1] The ratio of instructors to students was, in 1874, one to thirteen and six-tenths. Almost though not quite the same ratio of increase would hold true of the total cost of maintenance, though here it is difficult to draw a line between actual maintenance cost and more or less permanent improvements. A minor but significant case in point would be the expenditure for the building up of a library. The year Bascom arrived, the total expenditure for library increase was less than two hundred and fifty dollars; during his second year it approached two thousand, and thereafter the annual expenditure for this object hovered around fifteen hundred dollars. Further amassing of details is unnecessary; it is evident that the increased scale of expenditure was entirely due to the character of the instruction that was given and to preparation for the future. No one has recently accused the university of Bascom's day of luxury or extravagance; but it had piquantly demonstrated, in plain economic terms, the expensiveness of quality in higher education; nor would very many question its superior desirableness over what had gone before.

There were but four substantial buildings on the campus when Bascom came, namely, the North and South Dormitories, Ladies Hall, and old University Hall. Of these the first three were used almost exclu-

[1] The year 1886 is taken for the reason that the salary statement for the fiscal year ending September 30, 1887, comprehends in part increases that went into effect under Bascom's successor and contains, in addition, several errors.

sively as student residences, so that practically all the instruction of four hundred students had to be crowded into old Main Hall. With the development of the laboratory sciences this condition had become almost unbearable. "Never a fortunate building," poorly heated, poorly ventilated, shabbily furnished, with narrow, draughty passageways, Main Hall had not improved with the years and now it was dismally overcrowded, while the fumes of Irving's blast furnaces and the chlorine and sulphide gases always exuding from Daniells' laboratory mounted the staircases and mingled in every literary and philosophical discussion. The immediate remedy would be a Hall of Science to which the scientific and technical departments could be removed, greatly to their own advantage and to the relief of the remainder of the university. Such a building, Bascom, in his first report to the regents, placed as the most imperative material need of the university. Its next greatest need was an Assembly Hall, and next, but at a long interval, an Astronomical Observatory. All three were secured during the first half of his administration, and in three different ways. Science Hall was built by state appropriation; each of the others by means unique in the history of the university. The Observatory was the private gift of a citizen of the state; Assembly, or as it was long called, Library Hall, was built out of the savings of income.

An appropriation of eighty thousand dollars for a hall of Science was voted by the legislature of 1875. Under the supervision of a building committee consisting of Regents Van Slyke, Keenan, and Chynoweth, the building was completed and ready for occupancy in June, 1877. Exclusive of steam-heating, water, and machinery, the cost of construction came within the

appropriation; these items brought the total cost of the building close to one hundred thousand dollars. It was a plain massive structure of four stories. The ground plan was that of a rectangle sixty by one hundred and thirty-six feet, with the façade on the long side, intersected at the rear corners by two wings forty-two feet wide and seventy-eight feet in depth. The material was local sandstone from the Stephens quarries. The building provided ample space for the laboratories, lecture rooms, and "studies" of all the professors of science, and for the shops and machinery of the engineering department. The entire fourth floor of one wing was devoted to the University Cabinet. Recently this had been enriched through the purchase of the library and cabinet of Increase A. Lapham, an early friend of the university, the oldest scientist and most devoted collector in the state. A special appropriation for this purpose, of ten thousand dollars, had been voted by the legislature of 1876. An Art Gallery, forty-six by forty-three, must have afforded generous wall space to the old masters in the possession of the university; four landscapes, by Moran, are said to have been of considerable excellence. On the whole, for solid usefulness, dignified appearance, convenience, adequacy of equipment, this building was "equal to the best in the country," and, the regents delightfully added, Wisconsin "must be satisfied with nothing else." For seven years it was the capital showplace of the university; but its glory was of no longer duration. "Old Science Hall" was completely wrecked and its contents entirely destroyed by fire on the night of December 1, 1884.

In one great branch of natural science the university was notably deficient. Astronomy had been taught in

the early days by Professor Sterling as a subdivision of Natural Philosophy, and it was now appended to Physics under Professor Davies; but the astronomical apparatus of the university had always been ludicrously inadequate; there was "not a single good telescope in the entire state." The deficiency had long been recognized; but the equipment for practical work in astronomy was so expensive and its utility so remote that the state had not yet found the way to acquire this mark of civilization. In making the new levy for the university, the legislature of 1876 set aside, out of the funds to be raised, three thousand dollars a year for the support of astronomical work and instruction, on condition that, before the expiration of three years, a well-equipped observatory should be "given to the university within its own grounds without cost to the state." This quaint "hurry-up" to private generosity was responded to within the year by ex-Governor Cadwallader C. Washburn. It is explained by the fact that the legislature had received an intimation of Washburn's willingness to make this gift and took this means of reassuring the donor as to the conditions under which it would be administered. Ground was broken in 1877, but it was not until after the death of the first director and of the founder two years later, in 1882, that the last piece of apparatus was in position. The donor was unstinting in his provision for equipment and patient in meeting the minor demands which followed in the train of the main installation. Professor Watson had begun a Solar Observatory and a Students' Observatory, which Governor Washburn, after the death of the former and before his own, provided the means for completing. The university contributed twelve hundred dollars for the purchase of a minor telescope to be used by students.

Its situation on the crown of the twin hill to the west, overlooking University Bay, gave the Observatory a starry setting which was a worthy acknowledgment of the first great act of private munificence toward the university. In 1883, Cyrus Woodman, as a tribute to the partner of his old Wisconsin days, when he had been a member of the first board of regents, gave five thousand dollars for the endowment of the astronomical library which bears his name. This, like the greater gift, was accepted as distinguished evidence of private faith in the permanence of the university. Generously started and ably manned, Washburn Observatory immediately took and has held ever since a more than creditable position among institutions of its class.

By frugal management and by deferring the enlargement of the faculty, the administration, out of the proceeds of the mill tax of 1876, had accumulated in the next two years a surplus of thirty-two thousand dollars. With this sum in hand, the contracts were let for Assembly Hall, which was completed, at a cost of about thirty-five thousand dollars, in 1879. It was constructed, in the main, like all the preceding buildings, out of the local material; but a limited use of red sandstone was admitted in its trimmings, and a design was adopted which gave it something of the appearance of a chapel. Though not in itself unpleasing or inappropriate, it was unfortunate in setting the precedent of a departure from the simple rectangular lines of construction which had hitherto prevailed. Besides providing the university with a hall in which the entire student body could convene, the building was intended to accommodate, and in fact did accommodate (after a fashion) for about twenty-five years, the university collection of books, and their readers. In its two-fold aspect, it would be hard

to overestimate the significance of this old building as a rallying place of college life and influence. Had this building been consumed by fire, we should have regained one of the choicest sites on the campus, and we should have lost one of the most suggestive memorials of the "J. B." days.

It will have been noticed that among the appointments of Science Hall were steam heating and a water supply. While these modern luxuries were being installed, pipes were laid to the woman's dormitory and it, also, was linked to the progress of the ages; bathtubs and modern plumbing were added to the educational facilities of the young women. Having carried out these and similar improvements and having finally secured, in 1882, an appropriation of ten thousand dollars for the renovation of Main Hall, the officers of the institution congratulated themselves and the state that the necessity for such demands was ended for many years to come. But the hopes of a peaceful progress in other directions were overthrown by the disaster to Science Hall. The university suddenly found itself in the throes of another building era.

The destruction of so important a part of the university's plant seriously crippled its work for several years and retarded its internal progress just as it was getting thoroughly under way. This should be remembered in estimating the growth of instructional work during Bascom's administration. A large amount of energy was dissipated in improvising expedients to meet the immediate emergency and still more in the formation of new plans for the future and seeing them through. The legislature had to be reckoned with again, and yet again; the construction of new buildings more than occupied the remainder of Bascom's term; while the reassembling of

apparatus extended well into the next administration. The institution issued from this period of material anxiety stronger than before in its provisions for scientific and technical instruction, and it did not cease to grow; but it must have appreciably diminished its stride for the time being. What this new and lavish outlay may have cost the university in other directions it would not be easy to estimate.

Fortunately a meeting of the legislature was close at hand. Insurance to the amount of forty-one thousand dollars was available and authority was obtained to use this money for the purchase and installation of apparatus. The North Dormitory was cleared of students and fitted up to receive the departments that had been burned out. When, two years later, it became necessary to provide quarters for the Agricultural Experiment Station, every resource was being strained to find the means of completing the group of buildings already begun. The South Dormitory, which had already been invaded, was now remodelled and given over entirely to other purposes, and with this transformation, dormitories for men came to an end at Wisconsin.

"*The loss thus suddenly encountered will not prove wholly without mitigation, if it shall serve to impress upon the public mind the folly of subjecting accumulated treasures which no money can restore to like peril in future,*" wrote President Paul of the board of regents in commenting on the fire. It was resolved that Science Hall should be replaced by a group of buildings instead of a single structure; that the new Science Hall, proper, should be made as nearly fireproof as means would allow; and that the carpenter and machine shops, the chemical laboratories, and the power and heating plant, respectively, should be housed in separate buildings.

For these purposes, appropriations amounting to one hundred and ninety thousand dollars were made by the legislature of 1885. The contracts for the minor buildings were let first and at such figures as to eat into the main appropriation. When the bids on Science Hall were examined, they proved to be far in excess of the appropriation and, it was believed, outrageously in excess of a fair estimate. The regents determined to reject all bids and go ahead on their own account. Professor Allan D. Conover was relieved of teaching duties and appointed superintendent of construction. Work was begun in August, 1885, and finished in January, 1888. The original plans called for a building of slow-burning construction; but, as the work of clearing away the old ruin proceeded, the determination grew to make the new structure entirely fireproof. To do this meant greatly to exceed the appropriation. With the building half done, it became necessary to invite the legislature of 1887 to appropriate one hundred thousand dollars for its completion, forty thousand dollars more for equipment, and ten thousand dollars for furniture. The method by which the regents had carried on the work had offended some of the large contractors in the state, and the university found itself opposed by powerful enemies. There was a tedious investigation of several weeks which, however, was suddenly interrupted by the news that the bill for the needed appropriations had passed the assembly. The accounts of the regents show the final cost of construction to have been close to two hundred sixty thousand dollars, and of furniture and equipment, about fifty thousand dollars. The cost of the entire group was a trifle over three hundred and ninety thousand dollars, or somewhat more than twice the amount at first appropriated.

Boldly as the regents had proceeded, possibly even to the degree of having exceeded their authority, it cannot be said that they had overestimated the requirements of the university; nor, as it proved, had they grossly misinterpreted the popular wish so far as it was voiced by the legislature. Judge Keyes had excited no little merriment in the Committee on Appropriations when he hazarded the calculation that, within ten years, there would be a thousand students in attendance. Yet this pinnacle was attained before all the funds provided for equipment had been expended.

The new buildings were more remarkable for utility and security than for artistic merit. From the latter point of view, they have remained ever since an inharmonious element in the campus scheme, a discord the more grievous because of the colossal permanence of Science Hall which nothing can founder, short of an earthquake or a foreign invasion, or an æsthetic insurrection hardly more imminent than either. The three minor buildings were constructed of cream brick. The original plan of Science Hall had called for a stone structure with foundation facings of Berlin granite. When it was decided to make the building "fireproof in accordance with the best ideas of the time," structural steel (a most advanced engineering idea), hollow tile, and red brick were adopted for the superstructure, the whole topped with a high-pitched roof of black slate. The largest, most useful, most expensive, and easily the ugliest building the university had yet acquired, Science Hall will doubtless stand indefinitely, a monument to the prosperity, progressivenes, bad taste, and good intentions of the latter eighties.

Much of the credit and of the responsibility for the external development of the university during these

years belongs to the board of regents. Throughout Bascom's term, the business management of the university was more completely in their hands than it since has been. The law of 1866 excluded the president of the faculty from a seat in the board. Bascom appreciated the disadvantage of this arrangement and formally appealed to the board in 1877 to bring about a change; but no action was taken, although a majority of the committee appointed to consider the subject reported in favor of admitting the president to membership, stating in support of their recommendation that the practice at Wisconsin was unlike that of all similar institutions. With longer acquaintance, the diversity of view between the president and regents increased instead of diminishing, until at last the board took it upon themselves to define the scope of the duties of each. In Bascom's last year a bill to effect his object carried the state senate; but the opposition defeated it in the lower house. The opposition to the president on this issue was undoubtedly more a personal than a theoretical matter. Early in the next administration a law was passed making the president, *ex officio,* a member of the board of regents, with a voice in its proceedings and power to vote in case of tie.

Happily for the university, the board of regents contained several conspicuous men who, however they might differ from the president in ways of thinking or even in principles of action, had the welfare of the institution at heart. For the chairmanship of the executive committee, a resident of Madison was always chosen, and this officer was virtually the business manager of the university. As noted in a preceding chapter Napoleon B. Van Slyke filled this position from the time of the reorganization until the middle of Bascom's adminis-

tration. He was a banker and a man of keen business sense. He had a nipping and an eager eye and few details connected with university property escaped his observation and irascible care. In the days of the importance of small things he performed a valuable service for the university. He was succeeded in 1879 by Elisha W. Keyes, who held the position until his retirement from the board of regents in 1889. Judge Keyes, or as he was profanely called, "Boss" Keyes, was for many years the chief whip of the Republican party in the state. He possessed qualities that may be surmised from this eminence. To his expansive and forceful temper and command of the means by which things are brought to pass, the university owed, in no small measure, the ampler material scale on which it was developed during the decade between 1880 and 1890. In Bascom's reminiscences,[1] these two men are the only individuals associated with his work at Wisconsin who are distinguished by personal mention.

The president of the board from 1875 to 1877 and again from 1880 until his death in 1890, was George H. Paul of Milwaukee. Intelligence no less than long service gave him a wide grasp of the purposes and needs of the institution. His official reports on the condition of the university are eminent among the documents of their particular class in the printed records of the board of regents. Another regent who deserves mention was Hiram Smith, who was active from 1878 until his death in 1890, wielding an important influence as chairman of the Farm Committee. Governor Washburn, after his splendid gift to the state, was by legislative act made

[1] *Things Learned by Living*, pp. 70-71. His reference to Keyes is more kindly than that to Van Slyke, but this affability does not include the correct recollection of his Christian name.

a life member of the board of regents; but unfortunately his tenure was not long. In 1881, J. C. Gregory of Madison, who had rendered loyal service for a dozen years, was succeeded on the board and on the executive committee by William F. Vilas, '58, and a year later, another alumnus, John C. Spooner, '64, became a member of the board. Both were called to other fields in 1885; the latter to represent the state in the national senate, the former to join the cabinet of Grover Cleveland, and four years later, he, too, was elected to the senate.

President Bascom's attitude toward the board of regents, reminiscently at least, was incorrect, inasmuch as he seems to have regarded the board primarily in the light of an annoyance. In reviewing the conditions of university administration, he mentions as its chief drawback the fact that the board of regents "was made up almost exclusively of those interested in politics," and complains that "rarely, indeed, was any man granted the position of Regent who had any special knowledge of the methods of education or interest in them." Doubtless, in these respects, the conditions were not entirely what might have been desired, and doubtless the president was right in contending that he ought to have a larger hand in the business affairs of the university, but even so, he seems too little concessive in theory as he was in practice. After all, the university is a popular institution; this is its calling, by which it must stand or fall. It is highly improbable that in this state, or in any other at a similar stage, a group of men could have been assembled, possessing a special knowledge of education and possessing at the same time the ability and the influence necessary to procure from popular assemblies the material conditions requisite for a high order of educational

development. Bascom himself could not have secured these conditions without the assistance of men of large political influence and the order of abilities that this influence implies. It is well known that the efforts of Vilas, for example, were largely effective in obtaining the appropriation of 1885, as had been those of Spooner in obtaining the favorable legislation of an earlier period. The presence, upon the board, of graduates of the university whose popular qualities and reputation were such that they were accorded the highest political honors in the gift of the state, was of incalculable advantage in two ways; it intensified the zeal for the institution of the board itself, and it gained the university prestige in wider circles. And, as it was the office of the board of regents to mediate between him and the governing forces of the state, so was it the office of the president to mediate between the board and the more recondite educational aspects of the university. This he unquestionably did; but he shows too little consciousness of the positive use of the board in its particular plane of service.

It would be easy to attach too much importance, however, to the friction between President Bascom and the regents. It made his position more arduous; but it did not seriously impair his usefulness or greatly alter, in essentials, the course of the university. The fact that he differed from the board as to the methods to be pursued in attaining an object was of minor importance if in the long run the object was attained. In general, the material development of the university followed the lines which he advised. And whereas this was generally so of external matters, it was specifically so of purely educational concerns in which he was readily conceded to possess primary authority.

Of principal importance for the intellectual progress of the university was its relation to the entire system of public education in the state. The instinct of self-preservation had thus far prevented the university from shaking off its preparatory department,—a vexatious life-preserver, in that it had inherent predilections for the wrong side of the center of gravity. Deft escape from this embarrassing aid to navigation involved the use of some prudence and some courage. In the existing state of secondary education, to abolish the preparatory department would be to abandon a chief reliance for filling the college classes. Of eighty-two freshmen entering in the autumn of 1874, thirty-six were graduates of the graded schools of the state and exactly an equal number had been fitted in the university itself. The university must reach down to the next general level of education. As Bascom tellingly put it, "If you make a tree higher by raising its roots above the ground the tree will die."[1] On the other hand, the continuance of elementary classes congested the university with an inferior personnel and dulled its intellectual tone; moreover, it retarded the development of preparatory instruction elsewhere. Mature persons who possessed only the rudiments of an education and had no serious intention of pursuing an advanced course, could transiently identify themselves with the university and adulterate its general life; whereas the same patronage, though enervating to an institution of higher learning, might appropriately be a source of encouragement to schools of lower grade. A sudden application of new standards would imperil in some measure the actual usefulness of the institution; besides which the university must reckon with the popular dementia for estimating the success of an institution

[1] Baccalaureate: *Education and the State* (1877).

by the number of its students regardless of their quality. Yet a break must come sometime, if ever the university was to free itself from a burdensome drag on its intellectual life.

How far Bascom may receive credit for the steps immediately taken by the state to improve the condition of secondary education it is difficult to say. He devoted the opening paragraphs of his first printed report to a plea for improvement in this direction as yital to the health of the entire system of education in the state, including the university, and stressed the anxiety on the part of the university to surrender its preparatory work as soon as this should be practicable. Probably the same emphasis had currency wherever his influence extended. It was not a totally new question; but throughout this year, there was, among the educational leaders of the state, a noticeable unanimity of emphasis upon the subject of intermediate instruction. Searing, the new superintendent of public instruction, and, *ex officio*, member of the board of regents, made it the special topic of his annual report, and it was he that drew the excellent law, passed by the next legislature (1875), upon which was based the system of state aid in the maintenance of free high schools. After five years of the operation of this law there had been organized in the state one hundred and ten high schools, of which all except fifteen were receiving the benefit of the law. The time for which the president and faculty had been working and waiting was at hand. After due announcement, the last sub-freshman class was admitted in the autumn of 1879 and, on the completion of the course by this group, the preparatory department, except for a small Greek class, came to an end in June, 1881. So was accomplished an object which had been fitfully be-

fore the university administration for thirty-two years.

Five years earlier, the "accredited schools" system had been inaugurated, in order to stimulate special effort on the part of the secondary schools to prepare pupils for the courses of the university. The Madison High School was the first to take advantage of this mode of affiliation. By the time the preparatory work of the university finally disappeared there were thirteen high schools and academies on the "accredited list," and by Bascom's last year, the number had increased to thirty-nine. At the time the discontinuance of the preparatory department was determined, then, less than a dozen schools within the state had announced themselves as prepared to fit pupils definitely for the university. The action was boldly taken with a view to forcing the work of preparation as speedily as possible upon the secondary schools. This involved some sacrifice. The university was just recovering from the setback to attendance produced by a slight advance and more rigid enforcement of entrance requirements during Bascom's first two years. Since that time there had been a slow but steady increase, especially in the classical courses. By abolishing the preparatory department these courses were again hard hit and the total attendance was considerably reduced, falling, in 1882-83, to three hundred and sixty-seven, the lowest registration, so far as actual number was concerned, that the university had known for many years. The courage and wisdom of the step were quickly justified, however; recovery immediately set in; the number of the accredited schools rapidly increased, and the university soon had all the students of appropriate grade that it could conveniently provide for; although, chiefly from other causes perhaps, the classical courses never entirely recovered from the check they suffered at

this time.[1] The rapid growth in numbers came a little later; but its beginnings were perceptible at the very end of Bascom's tenure, when the enrollment jumped from four hundred and twenty-one to five hundred and five, an increase of forty per cent. in a single year.

During the earlier half of this period, as has been stated, the classical courses had steadily gained ground; during its middle years each of them held about an even balance with the scientific course. But about 1881, the Greek course began to fall away, not only in relative, but in absolute numbers and never regained its former strength. Thereafter, the set was increasingly toward modern subjects, toward science, and toward the technical departments. The tendency toward greater diversification of courses and toward more extended specialization in them had already manifested itself. The engineering courses, which at first had been differentiated from the general course in science only in the junior and senior years were extended to the sophomore year and finally, in Bascom's last year, were laid down for the entire four-year period. The influence of the president still retained Psychology as a senior study, but, with the removal of his personal pressure, this last integument of the old fashioned liberal ideal disappeared from the technical courses; even the small amount of foreign language retained was supposed to be of a technical character. Another innovation of this last year was an English course which required no foreign language for admission and only two years of a single language for graduation. The establishment of this course,

[1] The effect of what Bascom somewhere calls "the sensuous appeal" of science is well exemplified by the registrations of 1885-86, when, just after the starting of the new group of science buildings, fifty-seven out of eighty regular freshmen registered for the science course.

after the distinct separation of the engineering courses, combined with a somewhat lenient administration of the group known as Special Students, relieved the science course of its "general purpose" rôle and strengthened its special character. These processes of diversification were carried still farther at the beginning of the next administration.

Two matters of general management, not totally unrelated to each other, were items of concern during the earlier years of this period, namely, coeducation and student discipline. Coeducation existed, both practically and officially, before Bascom came and the importance of his influence in this direction has been overestimated at times. There was still some unrest on the subject, nevertheless, and this the casual firmness with which he aligned himself on the side of sex equality tended to allay. His position was well known in advance. Two years before coming to Wisconsin he had "made the conservative heart of Old Williams throb" by advocating the admission of women before the alumni association of the college. The reaction at Wisconsin took the line of deprecating the effect of the system upon the health of the women, and was probably a splinter from a wide discussion which followed furious attacks on coeducation ("where this means identical education of the sexes") by Dr. E. H. Clarke of Harvard, in the *North American Review* and before the National Education Association, in 1874. A return to some form of segregation was being considered by the board of regents during the year 1877, and the same year the board of visitors were shocked by the anæmic aspect of the young women of the university. The contention that a life of study was more injurious to female health than to male was statistically refuted by the president's record of

excuses granted on account of illness, which made out a much more shocking case for the men than for the women. The agitation blew over in the course of three or four years. Its most tangible result was probably a more serious attention to the sanitary condition of the women's dormitory to which reference has been made.

The difficulties of student discipline were rather mitigated than increased by coeducation. Offenses of scandalous gravity arising out of the propinquity of the sexes were extremely rare, and the regulation of excessive luxury or waste of time in social recreation was not yet a serious problem. Upon the usual peccadilloes of the college student, the presence of women acted as a restraint. This effect was particularly noticeable in the classroom, where there was relatively little of that disposition to annoy the instructor which so often existed in the men's colleges of the East; the only exceptions were in occasional cases of individual instructors whose eccentricities devoted them to what was regarded as a meritorious persecution. Outside the classroom, the men were still given more or less to those sorry pranks which used to be traditional among college students. Hazing, practical jokes, and the disfigurement of public and private property continued to be honored as marks of wit and spirit. The dormitories were usually the centers of disturbance and the old "dormitory court," which administered mock justice toward offenders against conformity and tradition, did not wholly die out until it was burned out of the "Old Gym" several years after Bascom left. Among the institutions which tradition had hit upon as a deserving victim of student mischief was the university farm, and so thorough were the depredations that Professor Henry reported not long after his arrival that it would be futile to continue experiments in

horticulture so long as this spirit prevailed. The classroom of Professor Rosenstengel was frequently the scene of ostensibly unexpected live-stock exhibitions. There was the usual standing feud between "town" and "gown" and an increasing one, during Bascom's time, between "barb" and "frat"; each of these was occasionally the source of an unseemly outbreak.

Bascom believed the best form of college discipline to be that which was most personal. Hence most of these trivial but annoying misdemeanors, as well as cases of dishonesty or serious neglect in connection with studies, were dealt with directly by the president. The culprit was summoned into the dreadful presence, where he found himself under the calm, inflexible gaze of his judge. He was keenly but fairly examined; the extent and nature of his guilt were ascertained and weighed, and his penalty fixed. It was soon over; but the shamefaced perpetrator of a piece of silliness usually felt that it was enough "to last a 'ealthy Tommy 'alf a year." To the average student, half-man, half-boy, each half embarrassed by the other, a sharp collision with the massive and self-possessed wisdom of John Bascom was a revelation of the nature of things. It shocked the remnants of the scapegrace out of many a budding citizen.

But the punitive treatment of misconduct, important as it was as a system in bringing the president into close personal contact with a troublesome element in student life, was of little consequence compared with the constructive influence he gradually acquired as a leader of student thought and ethics. The broad improvement in behavior came by substitution rather than by repression; by the stimulation of more serious interests; by a judicious allowance of freedom with the encouragement of

self-reliance and a sense of responsibility; in a word, by the creation of a spirit of maturity in the student consciousness. The university, as Bascom found it, had in many ways the social tone of a big country academy; he left it a college of men and women, by no means prematurely settled, but earnest, with an interest in important matters, public and private, and with reasoned opinions about them. It is doubtful if the undergraduates, taken in the mass, have ever had, before or since, so much of this tone.

In a larger measure than would seem possible under present conditions, this temper of the college came about through the direct influence of the president himself, partly through personal contact with individual students, still more through his addresses to the entire college or to representative groups, and through his daily teaching in the classroom most of all. There, year by year, he met every student of the senior class. Of Bascom's work as a teacher, we are fortunate in possessing a full analysis by an expert and an eye-witness, President Birge,[1] who was his pupil at Williams and his colleague throughout his Wisconsin labors. In a striking passage where Bascom's teaching is contrasted with that of Mark Hopkins, he points out that, what the student found in Bascom's classroom was "intellectual power at work."

"I never felt that I—the student in the class—was much more than one of the counters with which the game was played. I recited, I was sharply questioned, my ideas were sifted and corrected, I was thoroughly taught; but what was wanted from me was not so much my view as my aid in developing the subject along the lines

[1] *President Bascom and the University of Wisconsin*, read at the *Memorial Service in Honor of John Bascom*, December 13, 1911. One of the thoroughly indispensable university documents.

worked out by the teacher. He searched the empty recesses of my mind for the truth which he wanted. His teaching aimed to get my mind alive to the subject, so that I could see it as he did. His mind was at work in all its power; eager to move the matter along; pressing forward and carrying the students with it."

This of his general method. Of Bascom's special power in the teaching of philosophy and ethics, Dr. Birge writes:

"He found in philosophy the principles which made life coherent and intelligible. Here was knowledge which invited it to that world of things which is also the world of thought. Here was the truth whose vision glorified life and made it not a matter of routine, not an endurance of the inevitable, or an acceptance of the necessary, but a free, exultant movement through a world which is its possession, now and forever. From philosophy came the revelation which correlated life's scattered experiences and corrected its partial views. Here was the vital spark which made life really life, a power that can appropriate, assimilate, and live by the alien substances of the outer world.

"Dr. Bascom showed his students day by day in the classroom such a life . . ."

Then, after showing in greater detail the manner in which the teacher turned the light of philosophy upon the problems of life, and eventually upon the problems of society, President Birge concludes:

". . . *I question whether the history of any great commonwealth can show so intimate a relation between the forces which have governed its social development and the principles expounded from a teacher's desk as that which exists between Wisconsin and the classroom of John Bascom.*"

The influence which Bascom exerted throughout the college was rarified by an infusion of noble spiritual

teaching. He was religious in the broadest and most general sense as well as in the immediate Christian sense; and his influence in this sphere was neither fettered by dogmatic bias nor stultified by pietistic sentimentality. A teaching which involved these latter elements would have been unacceptable in the emancipated circle where his chief influence lay. He was advanced, yet not too advanced. The ultra-orthodox condemned him and regarded him as "a dangerous man"; but he was dangerous only to superstition and narrow-minded sectarianism. He held firmly the faith which was fast dying to that generation, with no disposition to release his grasp on the old before he was secure in his possession of the new. Thus his teaching was a well graduated antidote to the crass infidelity which in so many quarters followed upon the revelations of the new empiricism. It was free; yet it was not lost in a maze of half-grasped novelties of thought. The character of his teaching in general is ample assurance that his religious instruction would not be vague or lacking in positiveness, or in application to conduct; he led his disciples, and securely led them, along those higher ranges of religious contemplation where philosophy and worship coalesce. Sectarians might charge the university with impiety; but they could not make the charge with justice against the university of Bascom; it was religious in a worthier sense than they could well understand.

Such, in brief and all too general terms, was the influence of John Bascom. And yet it would be extravagant to suppose that so sweeping a change as that which took place in the temper of the university could have been accomplished by the president alone. Bascom's teaching was an important fact, it was the central fact in the intellectual progress of the university; but it

could not have prospered as it did, had not the community been in a measure prepared to receive it, and it could not have so prospered without the coöperation of a somewhat unusual faculty.

The small faculty inherited from Chadbourne remained unchanged, save for the addition of a few younger instructors, until the middle of Bascom's term. Then, on the eve of a considerable expansion of the teaching staff, came several deaths. With the filling of these places and of new chairs of instruction by the advancement of the younger men and by fresh importations, the faculty of the second half of the administration was substantially altered from that of its earlier years. The death of Professor S. H. Carpenter came close upon that of his friend Feuling, in 1878; Major Nicodemus died early in the following year, and little more than a year later came that of James C. Watson, the new professor of Astronomy. Already well-known in his field, the last named was cut down in the midst of preparations which promised for him still further distinguished work as director of Washburn Observatory. He was succeeded by Edward S. Holden, who had been trained in the Observatory at West Point.

Major Nicodemus had successfully piloted the engineering courses through their early stages, had discharged with firmness and tact the difficult duties of the military department, and had widely endeared himself by gracious personal qualities. With his passing, the special relation between the military and engineering departments came to an end. Allan D. Conover was promoted to the professorship of Engineering and, for military instruction, the university again became dependent upon army detail.

Professor Feuling was a Swiss who had enjoyed the

advantages of several foreign universities and was a competent philologist. His musical knowledge had made him, in an accessory way, of service to the university when there was no special department of music. William H. Rosenstengel, as professor of German, succeeded to the main burden of his work; he was a martinet of the *gymnasium* pattern, a sharp, effective classroom drillmaster. Students of the next twenty years would find a history deficient which contained no reference to "Rosie" and his "Esel-buch." Professor S. H. Carpenter was generally regarded, at the time of his death, as "the most popular teacher in the university." An ardent and impulsive temperament and outspoken, if sometimes hasty, convictions secured him the warm adherence of his pupils. He was an enthusiastic student of ancient and of French literature and possessed, for that time, a considerable knowledge of old and middle English, publishing two or three textbooks in this field, of which the most successful was his *English of the Fourteenth Century*. He was, also, an exceptionally fine teacher of Logic. Carpenter's Chaucer tradition was continued by John C. Freeman, who from the teaching of Greek in the (old) Chicago University had turned to the teaching of English and now adapted himself to the requirements of a new chair in English Literature.

From these years dated, also, the professorships of David B. Frankenburger in Rhetoric and Oratory; Rasmus B. Anderson in Scandinavian; Edward T. Owen in French; Edward A. Birge in Zoölogy; Fletcher A. Parker in Music; and William A. Henry in Botany and Agriculture. About the same time, chiefly in the year 1879, began the instructorships of Lucius Heritage in Latin, William H. Williams in Greek, Storm Bull in Engineering, George C. Comstock in Astronomy, and

Charles R. Van Hise in Metallurgy. To those who are unfamiliar with the history of the university it would be an arduous task to bring home the significance of this catalogue. Suffice it to point out, that the list contains the names of numerous professors of definite idiosyncrasy, each of whom made for himself a special place in the life of the institution; that it contains, also, the name of the creator of the College of Agriculture, now dean emeritus; of the present director of Washburn Observatory and dean of the Graduate School; of the recent dean of the central college who, after almost lifelong service in that capacity, has become president; and lastly, the name of the late President Van Hise, who had served the university in that office more years than any predecessor.

On its scholarly side, Bascom's main ambition for the university worked toward the creation of new chairs, not so much for the enlargement of instruction as for its subdivision, with the aim that all the important teaching should be in the hands of men of specific learning and of full professorial caliber. It was an idea which under the conditions of his day could be approximately realized and was realized, in considerable measure, through the appointments noted above. Of subsequent extensions into new fields the most important were the establishment of a course in Pharmacy under Frederick B. Power (1883), the appointment of John W. Stearns (1884) to a professorship in the Science and Art of Teaching, and the foundation of the Agricultural Experiment Station (1883), and the Farmers' Institutes (1885). The appointment of William Trelease to a professorship in Botany enabled Professor Henry to devote his whole strength to the development of the Agricultural department. The same year Henry P. Armsby was appointed

to the new professorship of Agricultural Chemistry which passed, in 1888, to Stephen M. Babcock. These enlargements of the scope of the university were made possible through the increased revenue voted by the legislature of 1883.

A few other important changes in the faculty occurred near the end of Bascom's administration. Edward S. Holden, director of Washburn (1881-85), left to become director of the Lick Observatory, and the same year Trelease was called to the directorship of the Missouri Botanic Gardens, at St. Louis. Death ended, in 1884, the long service of Sterling and he was succeeded in the chair of Mathematics by Charles A. Van Velzer. Less to be expected was the sudden end which overtook Irving, Heritage, and Allen within three years after Bascom left. Irving died in May, 1888, and Allen in December, 1889. Though Allen was by much the older man and though their work was as unlike in character as in subject-matter, these two had this in common, that both were conspicuous above their contemporaries for scholarly achievement and for the communication of the scholarly spirit. The seal too early set on their careers, so nearly at the same time, and so near the end of Bascom's administration, has caused their names to be linked indissolubly with each other and to confer all their luster upon that period.[1]

Of President Bascom's dealings with the faculty it has not been customary to say very much. He himself entirely ignores this relationship in his reminiscences, though he fully discusses his relation to the students and to the governing board. This may have no significance beyond the fact that, instinctively, contrasting as he did the western state university with the eastern col-

[1] For Irving, see *ante*, p. 185. For Allen, see chap. x, p. 185.

lege, he found less to remark in the faculty than in the other two of the three estates. His estimate of the general quality of the instruction was high, and his reviews of the labors of such men as Carpenter, Sterling, Irving, and Heritage at the time of their deaths, indicate that he was not indifferent to the achievements of individuals; but it was not the nature of his mind to throw great stress upon personal matters. Perhaps the most incisive statement of his ideas as to the relation which should exist between president and faculty in the conduct of a college is to be found in his response for the Williams faculty at the inauguration of Chadbourne, shortly before he himself went to Wisconsin:

"As Professors we have been wont to do each in his own department what was right in his own eyes, and he who has the power to teach must find this liberty his first condition of success. He who requires dictation is unfit for instruction. We do not see how the public, or any portion of it, shall say to a college professor what or how he shall teach, what opinions he shall hold, and when and where he shall express them, unless they wish to degrade a branch of knowledge, or make its impartation contemptible. When one is called to a professorship these subsidiary questions are settled, and he is then accepted in the freedom and integrity and totality of his manhood.

"The second point is scarcely less important. It matters little how skillful may be subordinate service, if the vessel itself is to be run on a rock. The value of the life-work of every professor is dependent, in the first instance, on his own skill, in the second instance on the able, successful administration of the college to which he belongs. It is not strange, then, that he should covet the right to be heard in its concerns, since these concerns are

his concerns, in a most immediate and weighty sense . . . There is no room here for jealousies, for assertion of slight authority. The college is intrusted to the concord and wisdom of grave and unimpassioned men. The President is a leader among equals, the weight of whose words is more that of wisdom than of authority."

These words produced a sensation when they were delivered; but their sharpness was entirely due to that quality of mind which frequently caused the speaker to be more concerned with the adequate statement of a truth than with the amenities of an occasion. It is open for the cynic to inquire how far the convictions of Bascom the professor were retained by Bascom the president. There is no question that some members of his faculty felt, rather uncomfortably at times, "that combined quickness of intellect, promptness of decision, and power of movement which made him hard to influence and difficult to turn,"[1] and that they sometimes found his astonishing impersonality a bit disconcerting. One of the older professors has recalled, as a tribute to Carpenter's courage and independence, that he was known "to beard Bascom in a faculty meeting." But the faculty saw more of him than did the regents and under more favorable auspices, and were better fitted to understand him. And whatever might be the force with which he advanced his opinion, he encouraged in the teaching corps a fullness of deliberation and a democratic participation in the government of the university which has become traditional in the Wisconsin faculty, and makes it impatient of anything which looks toward autocracy in academic matters. When, a few years later, President Adams undertook to introduce the senate form of government, he found this tradition so

[1] President Birge, in the address quoted above.

firmly entrenched and defended with so much spirit that he speedily abandoned the project. Even to the present day, though at some sacrifice of time and efficiency, the faculty has preserved its democratic form of government. And as the university has grown in size and complexity, the same principle has been extended, in the majority of cases, into its divisions and departments. In this democratic spirit President Bascom and his faculty worked together, if not with a strong sense of personal sympathy, with a strong sense of professional cordiality, and hence vigorously and enthusiastically, toward the same ends. He did not interfere with anybody's teaching; he "worked in his place and expected others to work in theirs." And so it was the work of the faculty, held together by the president's counsel and inspired and supplemented by his example, that carried the university on to a more strenuous life of teaching and study; nor more strenuous merely, but a life more deeply conscious of the worth and the delight of intellectual pursuits and of the social responsibilities which intellectual possessions entail upon the individual.

President Bascom tendered his resignation early in 1886, to take effect a year from the following June. Difficulties with the regents had made his work increasingly arduous and he had resolved to retire while he could do so voluntarily. Had he been disposed to fight he could probably have won; but a personal fight was not to his taste and, as the time was not far distant which he had originally set for himself as the limit of his tenure, he did not feel it incumbent upon him to continue the strife. Judge Keyes and his party in the board of regents would gladly have scored on the president by making his resignation immediately effective; but President Chamberlin, after he had been elected to succeed Bascom, refused to

lend himself to this project, and the opposition were obliged to content themselves with an ambiguous victory. Bascom retired in good order, with all his pieces unsilenced.

The most definite ground of objection to Bascom, on the part of his enemies in the board, had been his impolitic advocacy of prohibition; but the opposition was really grounded in something more fundamental and far-reaching of which this was only an exemplification. Between Bascom and the republican "old guard" of the state there could be no sympathy or even compromise; by temperament, personal ideals, and conceptions of the social order, they were widely separated. The hostility to Bascom found opportunity to manifest itself when he returned to Madison in June, 1890, to deliver the annual address before the university Law Class. His return was the occasion of an ovation on the part of his student following; but his address was virulently attacked by a faction of the press. A decision of the courts in "The Edgerton Bible Case," whereby the Bible was excluded from the public schools, had been sustained recently by the Supreme Court of the state. Bascom devoted a portion of his address to a dignified, but vigorous denunciation of the decision. He was bitterly arraigned for having chosen a peculiarly inappropriate occasion on which to display his lack of reverence for the supreme tribunal of the commonwealth. The summary, "Bascom Boils Over," which heads the *State Journal's* report of the address, indicates very accurately the tone of the attack on the former president of the university. The entire incident displays, to good advantage, Bascom's capacity for "stirring things up," and also, the nature of the opposition which he inspired.

But the days of the "old guard" were numbered.

The preceding autumn had produced Judge Keyes' valedictory to the institution. It had become traditional for the "Boss" to signalize his relation to the university by delivering an "annual address" to the sophomores and freshmen of the military department. The writer was an innocent witness of the last of these occasions. The sophomores and freshmen, in military array, had been rounded-up in old Library Hall. Judge Keyes appeared and took the platform. He was welcomed with an astonishing explosion of applause. The Judge acknowledged the ovation in a pleased manner and advanced to the front of the platform; but he no sooner opened his mouth to speak, than it became evident that the applause was ironic. Every phrase was followed at first by noisy hand-clapping and soon by the stamping and scraping of feet. As the situation dawned upon him, the Judge became confused, hesitated, and finally produced a manuscript from his pocket. This action was greeted with riotous demonstrations of delight. But the reading was not allowed to proceed; every phrase was now followed by a unison of cheers and cat-calls. At last, his patience exhausted, the Judge pocketed his paper, shouted a few angry sentences which were drowned in the uproar, and quickly left the hall. Never since has the university been imposed upon by a similar assumption of importance on the part of an outside officer. "O Julius Cæsar, thou art mighty yet," one could have exclaimed to the shade of John Bascom. He had left behind "powers that would work for him," not only in the university, but in the state.

UNIVERSITY HALL

X

TOWARDS A UNIVERSITY

THE commonwealth universities made rapid strides during the last decade of the nineteenth century. Although not confined to the Middle West, the movement was especially characteristic of that region and especially vigorous there. The peculiar development of these institutions was in part the result of economic factors, and in part it was favored by intellectual tendencies throughout the country. The economic progress of the eighties, so far as it was typified in Wisconsin, was described at the beginning of the last chapter. During the next few years the civilization of the Middle West underwent a quick transformation. The westering tide of population had reached the farthest verge of the continent and was beginning to dam back in the rich territory of the Mississippi Valley and the Great Lakes. Cities which had sprung up chiefly as trading centers for the reception and expedition of foodstuffs and other relatively raw products, now became centers of manufacture as well as of distribution. Splendid as the pine forests of the Northwest had been, it was becoming evident that they were not inexhaustible, and the more far-sighted of their exploiters were turning more and more to manufacture and to the purchase of more distant supplies of timber. The mineral ranges to the north and west were being opened and worked on a large scale. Transportation alone, with the accompanying

manufacture of railway supplies, was becoming a major industry. After a long lull, railway extension revived in the eighties. For some years Wisconsin farmers had been crowding into Minnesota and the Dakotas. Now the railroads pushed northward, opening up to agricultural improvement the cut-over lands of the central and northern parts of the state. New conditions enforced new methods. Even in the younger parts of the Middle West the best lands had now been farmed for a generation. As the population became denser, and land both dearer and poorer, progressive farmers began to see the expediency of marketing their produce in more condensed forms and to realize the necessity of applying more scientific methods to all the operations of the farm. These conditions in industry and in agriculture favored the support of technical research and education; prosperity made them feasible, and the spread of intelligence made them sought after. The accumulation of wealth increased the demand for higher education in general.

No less important was the improvement in the education that was offered, particularly in technical subjects. Within a few years important advances had been made in the training of university teachers. The foundation of Johns Hopkins, in 1876, and its subsequent success had given an impetus to specialization and research, both in the sciences and in the new humanities. Contact with the German university and real-schule had intensified the insistence upon research and upon special preparation for advanced teaching. Harvard and Columbia soon put their shoulders to the wheel, and when, in 1892, the new University of Chicago was founded, this tendency became manifest in the stress laid upon graduate work; but before this happened the movement

had already shown itself in several state institutions. By 1890, the solidity of the state universities was firmly established. Michigan had long been favorably known, both for its academic and its professional departments. The collegiate teaching of several other institutions of this class, notably of California and Wisconsin, was by this time on a sound basis. Though not precisely a state university, Cornell, with its sudden and brilliant popular appeal, furnished an influential example of the college of liberal arts in combination with flourishing practical courses in engineering and agriculture. In the expansion of the typical state universities, vertically toward graduate study and research, and horizontally into the applications of learning to the business of life, Wisconsin was now to play a leading part. The ideal had been implicit from the start; it had even been realized in some small measure; it was now to be realized extensively.

This stir of the outward world, the stir of the world of business, and industry, and opulence, on the one hand, and the stir of the new, strenuous, cosmopolitan world of scholarship and scientific research on the other, converged upon the quiet, cultivated parochialism of the earlier university, permeated it, dissolved it, and brought to the Wisconsin campus and the Wisconsim classrooms, in a very few years, a very different life and a different spirit. This is neither said in lament, nor in celebration; it is a statement of what occurred. And what occurred here, is what occurred in some measure, sooner or later, in most American institutions of learning.

The period of transition with which this chapter is concerned occupies sixteen academic years. It carries us past the turn of the century, past the first half century of university existence, and embraces two presi-

dential administrations and an acting-presidency. From 1887 to 1892, the president of the university was Thomas Chrowder Chamberlin. He was succeeded by Charles Kendall Adams whose administration lasted nearly ten years, ending (technically) January 21, 1902. Dr. Birge was acting president during most of President Adams' last two years and for a year following. Another era commences with the election of President Van Hise in 1903. For the period covered by the present chapter, the executive administration does not provide a satisfactory chronological unit. President Chamberlin's administration, though highly efficient, was too short to be conveniently treated by itself; that of Dr. Birge was tentative and still shorter; that of President Adams lies awkwardly between the two. If, however, we take President Chamberlin's first year as a point of departure, there follow three equal intervals of five years, of which the first is coterminous with his administration, in the sense that the progress of the university under his leadership is registered in the first year of his successor. The remainder of the period divides appropriately into two five-year intervals which readily lend themselves to purposes of comparison.

Before entering upon the details of the period which has just been outlined, it will not be altogether a digression to notice, side by side, the two men who were chiefly responsible for the conduct of the institution during this period. Thomas Chrowder Chamberlin had passed most of his life within the boundaries of the state. After graduating from Beloit College he had served two years as principal of a high school and spent one year in special study at the University of Michigan. Returning to the state as teacher of natural science at the Whitewater Normal School, he continued his scientific

studies independently and became, four years later, professor of Geology at Beloit. In 1876, at the age of thirty-three, he was appointed chief geologist of the state and in that position edited the *Geology of Wisconsin* (1877-83), in four large volumes and an atlas. At the time of his election he was with the U. S. Geological Survey as chief of the glacial division. Though his work in the presidency gave him no occasion for discouragement, the tasks of administration did not content him and, on being invited to join the staff of the new University of Chicago as head of the department of Geology, he embraced the opportunity to continue his scientific career.

President Chamberlin seemed to have, by nature, the university instinct. With him all knowledge took on inevitably the scientific form. Every problem was approached by the path of investigation and examined in the light of clear reason. Prejudice, even prejudice in favor of science, so far as this was humanly possible, was rigorously excluded. At the time of his connection with the university, he seemed to those who viewed him from afar, equally unhampered and unassisted by sentiment or irony. Naturally his influence made itself felt most powerfully among his colleagues of the upper faculty who were best fitted to comprehend processes of this sort and to sympathize with this tone of mind. His clear reasonableness probably appealed, also, to his business associates in the board of regents, for he readily won them to his purposes. To undergraduates, and perhaps to the general public, he seemed too distant and impersonal. Only those who were fortunate enough to come to close quarters with him could catch a hint of that softer nature which has ripened into the radiant graciousness of his later character. His genuine intel-

lectual ardor was not perceptible through the scientific medium in which he clothed his ideas, and his ethical conceptions seemed correspondingly lacking in familiarity and warmth. His thought was reasonable, but bleak; commanded respect, but awakened little enthusiasm of assent. Considering that his great service to the university lay in other directions, this was, for the time being at least, of little moment. Indeed, the absence of sentiment in Chamberlin's manner of meeting the students had, in one way, the virtue of a positive quality. It introduced a new style of academic dignity, in keeping with some of his cool innovations, such as the abandonment of Bascom's personal excuse system, the enlistment of the police to suppress hazing, and the substitution of a learned address for the time-honored rhetorical exercises of Commencement Day. Whether deserved or not, the president's reputation for unapproachableness served its turn in marking the change from the old intimate life of the college to the new and larger life of the university.

The next president carried on the university tradition, but in a very different manner, because of very different personal characteristics. Charles Kendall Adams began life as a farm boy in Vermont, and his early education was bought with hard manual labor and severe self-denial. It was not until his twenty-seventh year that he succeeded in "working his way" through the University of Michigan, graduating in 1861. Joining the faculty of his Alma Mater, as instructor in Latin and History, he was advanced within half a dozen years to a full professorship in History. Before settling to the duties of this post, he spent a year and a half in Europe, studying in German universities and traveling in France and Italy. On his return, he intro-

duced the German *seminar* method at Ann Arbor. He soon attained a position of influence in his faculty and became, in course of time, dean of the School of Political Science. In 1885, he succeeded Andrew D. White as president of Cornell University in which he had been, for some years, non-resident lecturer in History. The years at Cornell were among the most agitated, but the most constructive years of his life. His election had been carried by the retiring president against a strong opposing faction and the bitterness engendered in the contest never wholly died out. Renewed disturbances led to his resignation in 1892. Notwithstanding much unpleasantness, Cornell made distinguished progress under his leadership. Indeed, the conflict which characterized his administration was, in large part, due to the sturdy measures by which this progress was brought about.

President Adams' scholarly reputation rested chiefly upon two works, a monograph, *Democracy and Monarchy in France* (1872) and a *Manual of Historical Literature* (1882, 1889), and upon his success as a teacher and lecturer. Both as a writer and as a teacher his work was rather solid than brilliant. His learning was more extensive than profound, though his monograph won him considerable reputation for astuteness as a political critic. His historical manual was a pioneer of its class in this country. A charge of plagiarism, lodged against his monograph by an irresponsible contributor to the *Nation*, was shown to be fantastic; but the slander was periodically revived by his enemies. For it was characteristic of him that he acquired persistent enemies as well as devoted friends. Happily the latter were the more conspicuous at Wisconsin. Of university matters, President Adams not only had the

intimate knowedge gained from his experiences at Michigan and Cornell; he had, also, a thorough historical and theoretical knowledge derived from the study of educational institutions in this country and in Europe. His public addresses were often virtually short treatises on university education or on the relations of the university to the state. By knowledge, training, and conviction, he was, as Dr. Birge has put it, "through and through, a *State University* man."

Much of the influence of President Adams lay outside his dealings with the central faculty. To the faculty he seemed at times too indulgent toward student peccadilloes, especially in athletics, and he was suspected of a disposition to draw strength from the traditional enemy, the students plus the regents. There may have mingled a tinge of worldly policy in his view of university matters which would be inimical to the faculty temper. In the deliberations of a university faculty—of the Wisconsin faculty at any rate—there is nothing more ticklish than the argument from expediency. But there was never any long-standing division, and any distrust that may have existed was more than allayed by "his unfailing sympathy with scholarly aspirations"[1] and his unfaltering allegiance to the highest interests of learning. He did have, however, a strong student following of a vague sort. To be sure, he was in no sense a popular orator; his platform style was dragging and heavy, and the students found his formal dissertations tedious. Yet, though he never "played to the gallery," they instinctively felt, and rightly felt, that he was sympathetic toward their lighter as well as toward their more serious interests. This was a mild touch of human frailty which they found an agreeable novelty in a

[1] Faculty Resolutions, at the time of his resignation.

president. At the same time, there was a certain grandiosity about him. His Jovian head went well with ovations, and his thematic phrase "this g-r-e-a-t University," if not received with uniform reverence, produced its effect in time. During his first years at Cornell, he had borne the sobriquet of "Farmer Charlie"; but to his western constituency, he conveyed a suggestion of the man of the world. Even the sack coat and red four-in-hand which appeared on all but the most formal occasions, were relished by the younger race who were beginning to revolt from the frocked and cravatted taste in college professors. This applied not less to the younger scholars of the faculty than to the undergraduates, both classes rejoicing in the discovery that the intellectual life did not universally condemn its devotees to the styles of the sixties. The crude but hearty salutation, which was the "rocket" of those days, "What's the matter with Prexy? He's all right! Who's all right? Prexy!", came to have in it a very genuine unction.

In his outside intercourse with men of affairs whose actions and opinions were of importance to the university, Adams was singularly happy. He had many staunch friends and admirers among men of this class. Here, his wide familiarity with similar institutions, his patience and industry over material details, and his homely geniality and sense of human values were inestimably serviceable. He had not been six months in the state before he had brought about a substantial enlargement of the university income and a new appropriation for buildings and improvements. And, notwithstanding the financial depression which prevailed during the earlier years of his administration, each biennium brought a further enhancement of revenue, either for

buildings or support, or for both. Yet so prudently was the increased revenue distributed that no startling expenditure was visible in any single direction. Buildings and faculty, books and apparatus, the several departments relatively, were kept in an even balance and the entire university was kept evenly and steadily growing. Thus, in the sphere of building, for example, he began by renovating and enlarging the structures already on the ground, and it was not until the very end of his administration, when the campus blossomed forth with several new structures, that it became almost suddenly apparent how completely the whole place had been transformed.

Between the two presidents who shaped the course of the university in its period of transition, the contrasts, then, are obvious. Chamberlin came to his command a relatively young man with no university experience, but full of ideas, many of which were untried. The service of Adams occupied the closing term of a life devoted to university teaching and administration. President Chamberlin possessed, above all, the scientific spirit, together with a very strong sense of its efficacy in most of the departments of life. The interests of President Adams were primarily humane, social, and political. Though not in a direct or narrow way, each applied his specific temper to his administration of the university. Chamberlin's peculiar service lay in the distinctness and magnanimity with which he was able to forecast the new functions of the university, in the penetrating logic with which he outlined the institution to meet its later growth, and in the boldness with which he put his plans into execution. His work was the more fundamental, in a way, and the more creative; but it was relatively simple. The task which fell to President Adams was more complicated. It became his share to

fill in the outline that had been sketched and carry forward to success the work that had been begun; to enlarge the departments that had been created, to reconcile their conflicting demands, to secure larger and larger means for their continuance and growth, to enrich and control and unite the new, more complex institution that was arising. It was a work for experience, for patience, for sagacity born of a wide knowledge of institutions and varied contacts with men.

There is no more pregnant epoch of similar extent in the history of the university than the five years of Chamberlin's presidency. Men who were about then, saw the passing of the old college, and they saw the beginnings of the modern university. It was an expansive time. Life and innovation were in the air. The state was prosperous and had learned to share fortunes with the university. The new president was "a Westerner," almost, though not quite, a native son,—a product of western institutions, educational and other, in part a self-made scholar, young, robust, scientific, unimpressed by tradition, his strong, unsensitive face set to the future, whither he turned the university. For all his intellectual vigor and progressiveness, Bascom had worked almost exclusively within the traditions of the New England college. He understood the university idea; but what he really cared about was the college. He gave his strength to make Wisconsin a college such as he knew and believed in, and he succeeded; he made it a good one, "the home of a keen intellectual life." Thus, the last years of his régime marked the culmination of the entire earlier development of the institution. The new epoch marked a turning-point, a sharp swing in the road which suddenly brought into view the vistas of the future.

The time was favorable, the spirit was ready, the equipment was at hand, for expansion. And the expansion came, and came swiftly. Within five years, both students and faculty had more than doubled in number. The material university changed little in outward appearance; the buildings just finished amply accommodated the new host of students and teachers. But the university became far more populous; it swarmed; its activities became more varied; and this impressive liveliness inspired in a very short time, a further enlargement of its resources. Even more significant than the increase in numbers were the shrewd innovations in the plane and method of teaching and in the diversification of the fields of study which soon transformed the academic character of the institution. And quite as stirring, in its way, as the sudden increase in the size of the university or the boldness of its academic innovations, was the creation by the students themselves of a more enterprising campus life. However one may value their service to their Alma Mater, there was lavish energy of spirit in the generation of undergraduates who initiated and carried through the bustling development in intercollegiate athletics and other extra-curricular activities, during the early nineties. It was an embryo university which emerged at the end of this time, but the changes of magnitude and direction had been decisive. Inspiring possibilities had been disclosed, and ways had been opened, through which the university was to lay some of the main-traveled roads of the future.

There succeeded five years,—the first of President Adams' administration—during which the university reflected, in some degree, the general business depression that followed the panic of 1893. The hard times of the middle nineties modified, but did not stop, the growth of

the university. Twice, if we very properly ignore the increased attendance produced by the addition of the School of Music in 1895, the annual returns showed an actual loss in numbers over the preceding year. During the entire five-year period, omitting again the School of Music, attendance increased about twenty-six per cent; whereas the increase of the five years preceding had been over one hundred per cent. Counting all departments, the average annual increase of the later period was ninety-six against one hundred and thirty for the period preceding. A little more slowly, but surely, steadily, the university was growing.

The new academic tendencies and student activities continued to flourish with undiminished vitality. The temporary stagnation in the outside world of business and industry probably favored the development of advanced study; for it reconciled some men to spending a longer time in prèparation for life. Some of them it influenced to look more likingly upon professional or academic pursuits. It undoubtedly retarded the development of the technical departments. Another interesting result of the widespread financial stringency was its selective effect upon the student personnel. Throughout the state and adjacent regions were families of a certain range of means, who, under normal conditions, would have sent their sons and daughters to eastern colleges, but now embraced the opportunity for a respectable and less expensive education nearer home. On the other hand, many who might have found their way to the university were compelled to forego a college education altogether or content themselves with the advantages of still humbler institutions. These effects of the temporary financial stringency combined with the growing prestige and liveliness of the institution at

Madison to increase the proportion of its patrons who represented the wealth and social privilege of tributary regions. It was the policy of President Adams to foster the patronage of this class, not in a snobbish spirit, but in the belief that it made for a more cultivated tone in college society. Although wealth and culture were by no means synonymous labels, students of this class had, on the average, a more leisurely attitude toward education than the edifying offspring of poverty and ambition, and their presence was, on the whole, an encouragement to liberal studies.

Of course this group greatly stimulated the development of extra-curricular activities and recreations, and was in turn attracted by them. The development in this direction had been slower at Wisconsin than in many neighboring institutions. During the seventies and early eighties, leaders of student opinion often disclaimed any desire to emulate the frivolities of the "rich men's colleges" in the East; but, even before the departure of President Bascom, student critics had begun to upbraid their fellows for apathy in this respect. In the early nineties a great many new activities were brought forth with a bursting of cheers. Now, in the middle nineties they flourished and burgeoned with alarming vitality, and one heard all the stock arguments in their favor. The fallacy, if it be a fallacy, that the prowess of its athletic teams is an important factor in the drawing power of an institution of learning, never had so many devout adherents in and about the univesity as at this time. The president of the university was one of the believers.

It was perhaps the most brilliant era of Wisconsin athletics,—the time which, from the standpoint of the athletic enthusiast, "put Wisconsin on the map." For

a few years her athletic organizations performed with a higher average success in more departments than those of any single rival. She became, in short, "the leading athletic institution" in her territory, and boastful sons referred to her as "the Yale of the West," not foreseeing the fickleness that resided in the title. Athletics, and in fact all extra-curricular activities, except for occasional assistance from devoted alumni, were managed entirely by the undergraduates who dispersed the ever-increasing "gate receipts" with lavish hands. Probably that form of animal excitement, vivified by the sentiment of loyalty, which is known as "college spirit," never ran so high among Wisconsin students and alumni as during these years. A similar intensity pervaded all undergraduate enterprises. Wisconsin now had "college life" and had it abundantly.

The next five-year division carries us past the resignation and death of President Adams and closes with the end of Dr. Birge's acting-presidency. The era of business depression was over and the university shared in the revived prosperity of the country. The first year of this lustrum (1898-99) witnessed a sudden acceleration in the increase of attendance. During the preceding ten years there had been a quiet growth in the technical departments, but the larger gains had come in the central College of Letters and Science. The time was now at hand when the most rapid expansion was to come in the technical departments. In Engineering, the movement had aready begun; during these five years, attendance in that college increased 158 per cent; whereas the increase in Letters and Science was only 18 per cent. In the same period the enrolment in the College of Agriculture increased 66 per cent,—chiefly in the Short Course and the Course in Dairying. It was not until

the last two years of the period that a sudden increase of the small number of students in the full college course in Agriculture gave an indication of the movement toward agricultural education that was soon to take place. The central college was still the largest division of the university; but by the end of this period, the combined departments of Engineering and Agriculture were almost as numerous, and if we include the College of Law—which by this time had been brought into conformity with the general organization of the university—the technical and professional departments considerably outnumbered the central college. Moreover, for several years, the proportion of women in the central college had been steadily increasing and there had appeared a tendency toward segregation by subjects which created a perilous situation for liberal studies, so far as the men were concerned. As an offset to this view of the university, it should be remembered, however, that its divisions were less distinct than they might appear, since the technical students received a large share of their instruction in fundamental subjects, that is, mathematics, English, foreign languages, and the sciences, in the classes and laboratories of the College of Letters and Science. Still, much of this instruction was elementary in character, and the interest of students of Agriculture and Engineering was prevailingly in their applied subjects. There was, too, a clear trend toward applied and vocational studies throughout the university. After the turn of the century, this tendency became more pronounced, until, in some opinions, it bade fair to obliterate the ideals of liberal education, through the invasion by vocational courses of the central college itself,—a subject that will be more fully considered in a later chapter.

Alongside of this change in the academic temper of the university, there had developed a disquieting change in the spirit of student life in general. More and more, the heterogeneity of intellectual aims and occupations on the part of students was limiting their community of interests to athletics and other public activities and to their social recreations. Because, partly, of the publicity given to these features of college life, there was a universal tendency to exaggerate their significance and there was serious danger that, just when the university, in other respects, was advancing to a higher plane and quality of intellectual pursuits, large masses of undergraduates, entertaining an unspiritual idea of the purposes of education itself, would dissipate the precious energies of college years in purely extraneous trivialities. Tentative efforts to curb undergraduate excesses in these directions had been made; but the measures that had been adopted were insufficient. Now, the extravagance of social recreation and the disclosure of grave defects in student and alumni management of competitive athletics led to a sharp movement toward faculty control of all student activities.

The faculty, too, upon which fell the solution of these problems was a very different body of men from the faculty of a few years before. It was not merely much larger; it had changed very materially in the character of the individuals that composed it and in its manner of dealing with students, both in and out of the classroom. The development of graduate study and the growth of the university in size and complexity, with the progress of the technical departments, were accompanied by radical changes in the methods of instruction and in the composition and organization of the teaching force. In the central college, particularly, besides hav-

ing to satisfy a growing demand for advanced and graduate courses, the faculty was confronted with a formidable volume of elementary teaching and, as a consequence, with burdens of management which foreshadowed one of the graver aspects of the era that was to follow.

"The University of Wisconsin is in that transitional period in which it is easy to go either backward or forward," wrote John Bascom, in his farewell *Report* to the board of regents. There is no doubt of the direction which President Chamberlin chose to pursue. With clearly defined purpose he set about advancing the institution to a university basis. More distinctly than any predecessor he understood the university in three dimensions. He saw at once the opportunity to extend it both in area and in depth. More distinctly than any predecessor, also, he grasped at once the triple function of the university, that of undergraduate and professional instruction, that of original investigation combined with graduate teaching, and that of "university extension," or popular dissemination of the essentials of advanced knowledge. Of these, the distinctively university function, he saw, was that of individual research and leadership in original study, and his dominant interest was in the development of the institution in this plane. But before this could be accomplished in any notable degree, the spirit of investigation must be conveyed into the undergraduate courses so that they might lead up naturally, not in information only, but in method, to work of the distinctive university type. In lateral extensions of the curriculum, therefore, favor was shown to subjects of study which lent themselves to modern methods of investigation and teaching; or which, as in the technical departments, were most forward in the ap-

plication of science to industry. Of several departments established at this time, it could be said, and was, that their counterparts had not previously existed in any university. In order to facilitate all of these activities it was desirable that the university should be organized on a more logical and workable plan.

The university had already outgrown its earlier organization. The old College of Letters and College of Arts overlapped; the nominal divisions of the university did not coincide with the actual alignment of interests. Accordingly, an act of legislature was procured in 1889, whereby the old organization was abolished and the university was reconstituted into the four colleges of Letters and Science, of Agriculture, of Engineering, and of Law. All the departments of pure knowledge and investigation, including the physical sciences, were associated together in a single college, with complete autonomy as to its internal affairs; while each of the more powerful divisions of professional or applied knowledge was erected into an independent organization with which the central college might have such relations as should seem, at any time, reciprocally advantageous. For purposes of administration, the School of Pharmacy was later affiliated with the College of Letters and Science, and the Experiment Station was more closely united with the College of Agriculture. The College of Law was immediately reorganized, with General E. E. Bryant as dean. Two years later (1891), Dr. Birge was made dean of the College of Letters and Science, and Professor W. A. Henry was made dean of the College of Agriculture. The College of Engineering, for the time being, was managed by a committee of its faculty. These changes both simplified and amplified the mechanical structure of the university, classifying its activities more logically

and making room for larger growth in its several divisions. The same legislature which made possible these improvements in the machinery of the university, greatly unified the power by which it was controlled in making the president of the faculty, *ex-officio*, a member of the board of regents.

President Chamberlin's plans for the advancement of the university were favored by circumstances at the outset. One of the eternal conflicts in modern university management is that between men and appliances. The wages of the teaching force, always an incorrigible nuisance, become peculiarly so in an institution that is growing. Particularly in a state university, where there is only a nominal charge for tuition, an increase of attendance brings but a negligible enhancement of revenue to offset the added expense of operation which it involves. Resources are constantly being taxed to anticipate the expansion of the future by extensions of the physical equipment. The more rapid the expansion, the more hectic is the temptation to sacrifice animate to inanimate impressiveness. When Chamberlin came, the university had just been provided with buildings in excess of its immediate requirements and with a considerable appropriation for apparatus. With admirable coolness, he seized the moment of advantage to revolutionize the departmental scope of the institution. There was still room for improvements; but these were postponed. For a few years longer the cadets could shiver and grumble around the rude sheet-iron stoves in the old pine Drill Hall or "warm-up" by hurling the ancient bowling balls, Indian clubs, and other odds and ends, around its battered floors; the women might scold at the inconveniences of Ladies Hall or find lodgings in the town; and Professor Owen, muffled ear to ankle of his fas-

tidious length, might continue to curse the *courants d' air* of the recitation rooms in Main Hall. To put it baldly, Chamberlin spent his money for men. The "marauding expeditions" of the Wisconsin president advertised the university throughout the East, and the campus was re-colonized with a score of new heads of departments. The salary scale had been raised the year he came and was raised again before he left; while the creation of deans and the inducements offered Dr. Ely as director of the new School of Political Science and History set another range of compensation for semi-administrative positions. In five years, though all other operating expenses increased only fifty per cent, the annual expenditure for instruction was doubled.

The faculty of the university when President Chamberlin took charge was still a relatively simple, if not very logical organization, consisting of 24 professors, 2 assistant professors, and 8 instructors, in addition to a library attendant, one full professor and several assistants at the Experiment Station, and half a dozen demi-professors in the Law School. At the end of our period, the number of full professors had increased to 59, and members of the faculty of all other grades to 125; that is, while the number of professors had doubled once and a half, the teachers of less than full professorial rank had become eleven times more numerous. These proportions changed relatively little during the first five years; for while the number of professors increased from 24 to 43, there were still only 6 assistant professors, 16 instructors, and 2 assistants. In addition, the work of instruction required of the university fellows was then of some importance. Even with these included, however, the full professorships substantially outnumbered all other faculty grades.

During the second lustrum there came the development of what might be called the *middle* faculty. The expansion of the central college and the growing volume of elementary instruction required of it were now chiefly met by augmentation of the lower ranks of the faculty. There were only three more professors at the end of this time than at the beginning; but the number of assistant-professors had increased from 6 to 24. In addition the associate-professorship had been introduced, a rank first conferred in 1893. These statistics indicate that the faculty was maturing and filling out within the boundaries of the departments already established. Men who had served their apprenticeship in the instructional ranks were being retained and entrusted with greater responsibilities, and the faculty was further filled out by calling from abroad men of this rank or of a promise which soon brought them advancement. By this means, the departmental leaders were freed for more advanced and special work. Meantime, the number of instructors had been increased from 16 to 26, and of assistants from 2 to 14. There were 49 professors, 2 associate professors, and 64 of all other grades. The numerical predominance of the lower ranks continued to increase during the third five-year period, though at a somewhat slackened rate, for while the number of professors was augmented by ten (about 20 per cent) the total of other ranks nearly doubled, producing the disparity noted above. But the sphere of most rapid expansion had shifted to the ranks of instructor and assistant, the number of assistant-professors advancing from 24 to 35, or about 46 per cent, while the number of instructors advanced from 26 to 58, and of assistants from 14 to 30, an increase of 120 per cent in the two lower grades. This shift in the balance of the faculty was due

to the large increase of elementary instruction through the growth of the technical departments, and to changes in the methods of instruction.

The faculty had become in a very few years not only a much larger, but a much less homogeneous body. Therein it reflected the change in the university as a whole. Looked at horizontally or vertically, its stratification is striking. Looking horizontally, one sees side by side, in parallel columns, as it were, the boldly contrasted departments of the university, represented by individuals of widely different intellectual temper, attainments, and pursuits,—Greek and Philosophy on the one wing, balanced by Hydraulic Engineering and Dairy Husbandry on the other, with Mathematics and the Pure Sciences pillared somewhere in the middle. The up and down layering of the faculty multiplied the miscellaneity of the group. At the base was the crowd of assistants and instructors, some of them just out of college and retaining much of the undergraduate point of view; some of them only temporarily committed to teaching; some, youthful specialists just entering on a scholarly career, whose first contributions to knowledge had recently been certified at Leipsic or Berlin, Johns Hopkins, Harvard, Cornell, and in a few cases at Wisconsin. Somewhat more advanced in maturity and in the stability of its attachment to the faculty was the substantial group of assistant-professors. By a twist of psychology which we will not pause to analyze the members of this group were often much more uncompromising on academic questions and toward recalcitrant undergraduates, than their elders. The professorial heads of the hierarchy, in turn, composed a sufficiently heterogeneous body. In part they were "old-fashioned professors" who had spent a lifetime in the service of the institution. Of these, a

few had kept pace with new knowledge and new methods and were still a power in university councils; others had lost step and were slipping into the background. Many were younger men who during the rapid extension of the faculty had been summoned from other fields to take charge of newly created departments, or young specialists, of exceptional power who, called to tentative positions in the lower ranks, had developed their subjects and established them as permanent departments of the university.

In the main, this manner of constituting the faculty was favorable to the breadth and the alertness of its intellectual life. The competition, both between departments and within them, made university teaching a more lively occupation than in the older days. To the younger men the possibility of promotion offered a constant incentive to more strenuous scholarship; while the presence of a group of ambitious young rivals was a wholesome spur to their elders. The intellectual tone of the faculty was in marked contrast to that of the old-fashioned college in which a more or less uniform group of cultivated gentlemen, year after year, bestowed upon a more or less stereotyped group of undergraduates the annual appropriations of learning and humor.

Yet more remarkable, when all is said, than the heterogeneity of the faculty, was the firmness with which it was held together by a potent and relatively harmonious "university spirit." Among the ponderable factors which contributed to this result, one was the existence of a general parliament in which the larger questions of educational policy were discussed with great fullness and frankness by the entire faculty. In these councils the liberal college continued to hold the position of leadership, partly

through additions to its strength, but in no small measure, through the wisdom of progressive members of the older faculty who, by not opposing unreasonably the newer movements of the university, were the more able to resist vagaries and preserve the essential traditions of the college. Both President Chamberlin and President Adams, happily, were interested in perpetuating the strength of the liberal college. Not the least of personal factors in preserving the integrity of the college has been the long service of Dr. Birge, from the days of Bascom's presidency until his own, as leader of the faculty and close associate of successive administrations. Though a scientist in special scholarship, his mental life founded itself securely on the old liberal training of Williams College. Familiarity with every detail of the university, breadth of knowledge and intellectual sympathy, unusual powers of analysis, precision and balance of judgment, and keenness in debate, made him a master of compromise and a mediator peculiarly invaluable in a period of transition. To him, more than to any other individual, is due the preservation of the central college and the continuity of its influence in the university.

Turning now to review briefly the progress of the several colleges in this period, we shall see that movements which were begun under Chamberlin were carried forward to a symmetrical level under Adams and Birge. In almost every particular, the year 1903, furnishes a convenient *terminus ad quem* for the taking of stock and a girding of loins for a new movement toward the future.

The reorganization of the College of Law has been mentioned. Though many good lawyers had gone into practice from this institution, its requirements for admission had been low and its administration lax. For

many years it was too frequently a refuge for students who had failed to maintain a footing in other departments of the university. The faculty of the college had been composed entirely of members of the local bench and bar. This system had the advantage of bringing the student into contact with practitioners of conspicuous talent and strong personality. The names of I. C. Sloan, Burr W. Jones, R. M. Bashford, and John M. Olin are memorable in the law annals of these years. The last, in particular, was a teacher of almost awesome severity and power. "I have Olin, tomorrow," quashed any enticement to recreation. But though individual lecturers were lacking neither in ability nor zeal, the system was doomed to condemnation.

Important steps in the improvement of the college were taken under Chamberlin. The new dean was required to give his entire time to the work of the college; the fees were raised; the curriculum was enlarged so as to occupy two years instead of one; and preparations were made to remove the law classes from "down town," where they had always been, to the university campus. During Adams' first year the new building was occupied and the college, "for the first time in its history, seemed to be fully incorporated as an integral part of the university." The following year the course was extended to three years; a policy was definitely adopted of "placing less dependence upon professors actively engaged in the practice of the law and more upon professors who could give their entire time to the work of the school"; and a year later, the requirements for admission were made the same as those to the College of Letters and Science. A full-time faculty was gradually built up through the appointment of Charles N. Gregory '71, in 1894, A. A. Bruce '90, in 1898,

Howard L. Smith '81, in 1900, and E. A. Gilmore, a graduate of the Harvard Law School, in 1902. Gregory resigned in 1901 and Bruce a year later. Of the close of Dean Bryant's fourteen years of service, almost coterminus with this period, I cannot do better than quote the gracious words of his successor, the present dean:

"In June, 1903, Dean Bryant resigned the office of Dean and was elected resident Professor of Law, in charge of the courses in Pleading and Practice. This change was at the request of Dean Bryant, who desired more time to devote to teaching and investigation. As he had already covered the subjects of Pleading and Practice in a number of treatises recognized as authoritative by the profession, the announcement that he would continue as a professor in the school was regarded by law school men and the profession generally as peculiarly fortunate. By his sudden death in August, 1903, the hope that he would be able to devote many years to the school was destroyed. His death brought a sense of personal loss to everyone who had known him, and particularly to his old pupils, who knew and appreciated his untiring devotion to their personal interests, as well as to the school, during the period of his Deanship."

The advances in the College of Engineering lay chiefly in the direction of the subdivision and addition of departments of study so as to offer more detailed preparation for the several branches of engineering practice, and in the provision of more adequate facilities for this expensive type of instruction. The first legislature of Chamberlin's term (1889) specifically appropriated, for the continuous use of this college, one per cent. of the railroad license tax of the state. The work of the college was immediately recast and very much enlarged. A distinct chair of Mechanical Engineering had been

created in 1885. In 1889, a department of applied Mechanics was differentiated and given to L. M. Hoskins '84. Two years later, Hoskins was advanced to the professorship of Mechanics; Professor Storm Bull, who had been with the department since 1879, was assigned to Steam Engineering, with A. W. Richter '89, as instructor in the same subject, and a third chair, of Machine Design, was created, with A. W. Smith as professor. The same year (1891) Professor Allan Conover having resigned to devote himself to the practice of architecture, the department of Civil Engineering was subdivided, and N. O. Whitney was called to the chair of Railroad Engineering, and C. B. Wing to that of Bridge and Hydraulic Engineering. Two years later the topographical work was placed in the hands of a special instructor, L. S. Smith '90; and J. G. D. Mack was added to the mechanical staff. Hoskins, A. W. Smith, and Wing were all carried off, in 1892, by Leland Stanford University, and their places were taken, severally, by E. R. Maurer '90, by F. R. Jones, and by F. E. Turneaure. D. C. Jackson, then division engineer with the Edison Company, was called the same year to begin the development of a course in Electrical Engineering. This proved successful and popular and became, within a few years, the largest of the three main divisions of the college. From Electrical Engineering there sprang, a little later, under the leadership of C. F. Burgess '95, appointed instructor in 1896, a new division of Electro-Chemical Engineering.

The high proportional increase of attendance in this college toward the end of Adams' administration has been noticed. In actual number the students in Engineering, from 75 in Chamberlin's first year, had increased to 179 in 1892-93, to 227 in 1897-98, and, at the

end of another five years, to 585. The problems of administration involved in so sudden and extensive an increase of numbers was very clearly stated by Acting-President Birge in his *Report* of 1902. Since the conditions in this college illustrated, in an acute form, the effect of increase of numbers throughout the university, the passage may be quoted for its general import, as well as for its special information:

"The attendance on this college has nearly doubled during the past two years and the increase in numbers in the lower classes is such that as they move on to junior and senior rank it will no longer be possible to teach in one section the divisions which have formerly been small enough to be handled in this way. Large additions must, therefore, be made to the teaching force from the mere increase in numbers. In a similar way, the increase of students has made it necessary to duplicate extensively much expensive apparatus, so that the students may be able to carry on their laboratory work. In this way has been expended a large share of the money appropriated for apparatus in this department by the last legislature—money which it was hoped might be applied to additions to the laboratory equipment, which should enlarge it and bring it more nearly up to date in its extent and quality. But when we consider not merely the immediate demands caused by numbers, but the growth of the college as made necessary by the progress of engineering science and by the demands of those employing engineers, we find that even greater demands have come from this source than from the increase in numbers. The standard of engineering education is rising rapidly. New demands, of which electrochemistry is only one example, are coming forward and attaining such economic importance that the University must recognize them and be equipped to teach them thoroughly. Thus, the expense of maintaining a technical school, as well as all other departments of the University, must constantly rise in order to meet with the

increasing demands of a civilization which depends more and more upon highly specialized and technical education."

The Machine Shops had been greatly enlarged in 1894 and an added appropriation for the support of the college was secured in 1895. The need of a special building for this department was urged by President Adams at the very beginning of his administration and, in 1896, he mentioned this as "the most pressing of the material needs of the university." Finally, in 1899, the legislature appropriated $100,000 for this purpose and, the same year, Professor J. B. Johnson was called to the deanship of the college. Two years later, an appropriation of $30,000 for apparatus was secured. The prospects for the college were now very bright. The new dean prophesied that it would become "in the very near future, the leading technical school of the Mississippi Valley and one of the two or three leading schools of applied science in America." Unfortunately he did not live to assist in the realization of his prophecy. The following summer, the entire university was shocked and grieved at the news of Dean Johnson's sudden death by accident. The administrative work of the college was entrusted to Professor Turneaure, as acting-dean, and he discharged the duties of the position so satisfactorily that, a year later (1903), he was appointed permanent dean.

It will be noted that the main outlines of the college had been established during President Chamberlin's last two years; while its resources and facilities were greatly enlarged under President Adams. At the end of this period there was no sign of a diminution in its headway. The administration of this department of the university was notable for a judicious confinement of its

activities within the bounds justified by its resources and for the maintenance of a severity of standards which made the courses in Engineering among the most arduous and the most respected in the university. There was observable, moreover, a vigorous *esprit de corps*, not only amongst the students, but amongst students and faculty combined, which caused the College of Engineering to be frequently cited in defiance of coeducation.

Although in the College of Engineering some valuable experimental work had been done, especially toward the end of the period under review, the chief progress, in both of the divisions of the university thus far noticed, had been in the direction of more effective preparation for professional practice. The converse was true in the development of the College of Agriculture. "The history of agricultural schools in this country and in Europe shows that they are the most difficult to sustain," President Salomon of the board of regents wrote in 1867. Fourteen years later, President Bascom recorded that the agricultural department was "for the first time beginning to strike root a little and promise some growth." This was at the beginning of Professor Henry's connection with the university. But it was fully twenty years later, at the very end of the period, that agricultural education on the collegiate plane began to show signs of life. It was not until progress had been made in applied research and in the diffusion of scientific knowledge by means of printed bulletins, of farmers' institutes, and of short practice courses, that the collegiate course in Agriculture attracted any considerable body of students. The significant truth is, doubtless, that, though one of the oldest of arts, Agriculture is one of the youngest of the sciences. Even in reference to agricultural "extension," as Dean Rus-

sell recently remarked in conversation with the writer, "Research must be kept alive or we shall have nothing to extend." Before it could take its place in competition with other subjects of collegiate instruction, Agriculture must be built up as a combined science and art, demonstrate its efficiency, and persuade its clientele. It was therefore in the related activities of the application of science to specific problems, and the diffusion of practical information through various agencies, especially through the "short courses" in Dairying and the like, that the first significant advances were made.

President Chamberlin's keen eye for whatever was most advanced and promising in applied science was naturally attracted to the opportunities in this field. And, just at this moment, there came timely assistance through the provisions of the "Hatch Act," whereby the Experiment Station, in common with like institutions throughout the country, received from the national government, $15,000 a year for the support of agricultural research. Three years later (1890), the supplementary "Morrill Grant" added to the support of schools of applied science another $15,000, with the further provision that the appropriation should increase $1,000 a year until it reached $25,000. With this substantial assistance from the nation and with cordial favor from the state government, the agricultural activities of the university entered on a new era, under the able and zealous direction of Dean Henry.

Of the basal sciences, the only one which up to this time had been much developed in relation to agriculture was that of Chemistry. As head of this department, Wisconsin was fortunate in securing, from the New York Experiment Station, S. M. Babcock, who entered upon his duties as professor of Agricultural Chemistry

THE BABCOCK TEST

Henry Chamberlain Babcock

during Chamberlin's first year (January, 1888). With him was associated, as assistant, F. W. Woll, a graduate of the University of Norway. The same year there was created and filled by the appointment of F. H. King, a chair of Agricultural Physics, "the first chair of this kind, so far as known, yet specifically established." Five years later, at the end of Adams' first year, the development of another pioneer department, that of Agricultural Bacteriology, was placed in charge of H. L. Russell '88. A somewhat different class of experiments and teaching was inaugurated with the creation of a chair of Horticulture, under Professor E. S. Goff (1888-1902), and a professorship of Animal Husbandry, first held by John A. Craig (1890-97) and subsequently by W. L. Carlyle (1898-1903). The appointment of Professor E. H. Farrington, in 1894, brought the work in practical dairying into still closer relation with the more purely scientific wing of the department. In this connection should be mentioned Dean Henry's investigations of which the results were later combined with compilations on the subject in a standard text, entitled, *Feeds and Feeding.*

In addition to the voluminous annual *Reports* of the Experiment Station, its special *Bulletins,* down to June 30, 1903 number precisely one hundred, and of these, all but eight or ten belong to this period. Many of these of course are merely critical compilations of the best and newest information bearing upon particular agricultural practices, issued for the diffusion of useful knowledge among the farmers of the state. Many, however, embody the results of original investigations and experiments, and not a few represent the application to particular problems of very advanced types of scientific research. Among the important discoveries of this

period was the "Wisconsin Curd Test," for the detection of taint or bacteria in milk, devised by Babcock, Russell, and Decker in 1896. This process was found to be of special service to manufacturers of cheese. Of its practical results, Dean Henry declared, eight years after its invention, that it returned "annually to our people the whole cost of their Agricultural College." This exploit was shortly followed by a still more interesting application of science on the part of Babcock and Russell. Having demonstrated the presence in milk of minute quantities of a hitherto undetected enzyme which they named "galactase," and having, by continued studies, found that it closely resembled some of the fluids of the alimentary canal, the investigators were led to suspect that the so-called "ripening" of cheese might be in part a sort of digestive process and not, as had been supposed, primarily the result of bacterial action. This suggested the practicability of low-temperature curing of cheese. Practical demonstrations established the validity of their theory and resulted in important economies in the methods of storing and curing cheese. Thus researches which, in the first instance, were dependent upon the most exacting technique in the sciences of Chemistry and Bacteriology, issued in applications of the broadest economic character.

But the most noted achievement of the Experiment Station in this period, and doubtless, all things considered, the most momentous, was the origination of the famous "Babcock Milk Test." Ever since the discovery by De Laval, in Sweden, of the centrifugal process of separating cream from milk, agricultural chemists had sought a simple, accurate, and expeditious method of measuring the butter-fat content of milk, but without success. Such a process was the one thing needed to

place coöperative dairying on a sound basis. Tradition has it that Professor Henry, at the suggestion of President Chamberlin, set Dr. Babcock at work upon the problem. After long and persistent experimentation, in the course of which one difficulty after another was confronted and overcome, all the requirements of a satisfactory solution were met. *Bulletin No. 24* of the Wisconsin Experiment Station, issued July, 1890, announced the invention of the long-sought process. The economic importance of the discovery gave it wings. Within a short time, the fame of the invention and of the inventor was as widespread as the dairy industry. "The Babcock test was to associated dairying," says Dean Henry, "what the Morse electric telegraph was to railroad operation." The potency of this concrete achievement in establishing the prestige of scientific research, and ingratiating the university with the state, cannot be estimated. Though by no means Dr. Babcock's most distinguished achievement, in a purely scientific sense, this discovery has remained his chief title to popular fame. The triumph was made more piquant by the circumstance that Dr. Babcock, in order that the beneficent effect of his invention upon the dairy industry might be as little obstructed as possible, refused to let it be exploited under the protection of patent. It was in recognition of this spirit of public service that the state legislature, in 1899, voted him the very unusual honor of a commemorative medal, which was formally presented at a special meeting, two years later.

It happens that each of the scientific enterprises just mentioned bore directly upon a single industry, that of dairying; but in many directions, in the course of this period, the university multiplied and widened its activities in relation to the farming interests of the

state. The reclamation and treatment of soils through proper drainage, fertilization, and tillage; the promotion of the beet sugar, cranberry, and tobacco industries; the improvement of fruit varieties and the inspection of nursery stock; the introduction of more scientific methods of feeding; the analysis and control of concentrated feeding stuffs and commercial fertilizers; the testing of herds with a view to raising the standard of production; the detection and eradication of tuberculosis among dairy cattle; the prevention of potato scab and oat smut; the discovery, improvement, and dissemination of improved varieties of oats and corn; were among the more important advances in agricultural practice for which the farmers of the state were indebted to the initiative and activity of the College of Agriculture.

While the *Reports* and *Bulletins* of the Experiment Station reached a wide audience, perhaps of even greater importance in extending and solidifying the influence of the university in the state was the development of the Farmers' Institutes and of the Short Courses in Agriculture and in Dairying. Farmers' Institutes and a Short Course in Agriculture had been inaugurated about simultaneously in 1885-86. Priority has been claimed for Wisconsin in the devising of both of these expedients for the extension of agricultural knowledge. Both were parts of a programme for removing the reproach of ineffectiveness which had so long attached to this department of university effort. Under the superintendency of W. H. Morrison, and later of George McKerrow, the Farmers' Institutes were soon placed on a successful footing. During the nineties, upwards of one hundred communities of the state were each year organized into conferences for the hearing of reports and discussions upon matters of practical interest to the farmer. In 1887,

there were distributed 31,000 copies of the first *Farmers' Institute Bulletin*, and by 1896, the demand was such that an annual edition of 60,000 was required. In this year, a representative of the Michigan Agricultural College, making the rounds of the various states which had introduced the system, reported that the Farmers' Institutes were better organized and more successful in Wisconsin than in any other state. The Short Course opened for the first time in January, 1886, with eighteen students and ran for twelve weeks; later, the course was extended to two winters, and in 1897, the term was lengthened to fourteen weeks. Of the beginning of the Dairy Course, Dean Henry has written as follows: "As Wisconsin was the first State in the Union to inaugurate a practical brief course in agriculture, so she was the first to establish a dairy school, and the old frame building now seen at the University farm is already of historic interest, for it was the first dairy-school building in America." The Dairy School opened in January, 1890, with two students. The following summer the Babcock Milk Test was published, and, as a result, it is supposed, of the advertisement thus wrought, more pupils applied for admission the following winter than could be accommodated. Seventy were actually enrolled. Hiram Smith Hall was occupied a year later, and was enlarged, in 1899, so as to accommodate one hundred and fifty pupils at one time. In order to restrict its opportunities more largely to residents of the state, a substantial non-resident fee was attached to the course.

The combined effect of these several agencies upon the agricultural intelligence of the state, not only with reference to the practice of agriculture, but as regards the whole mental attitude of the people engaged in it, is

simply incalculable. Toward the end of this period the university was sending back to the farming communities of the state, every spring, between three and four hundred young farmers who, by their brief but intensive studies of the winter, had caught something of the scientific spirit, had been led to see more interesting meanings in the tasks of the farm, and, by contact with superior men, had been inspired with an ambition to become good agriculturists and good citizens. Nor is it altogether of trivial account that many of them carried back, also, something of respect and affection for the university. A concrete expression of these rather vague generalities appeared toward the end of this period in the founding of an Experiment Association composed of former students of the College of Agriculture, mostly those of the Short Course. A brief statement of the character and purposes of the organization is contained in the following excerpt from Dean Henry's *Report* of 1904:

"One object of this Association is to secure new and improved varieties of seeds and plants through the Experiment Station and other sources, test them on the farms of its members and select and disseminate the best among the surrounding communities. This Association now numbers over five hundred paying members, and its work is already so great that it was recognized by the legislature of 1903 in an annual appropriation of $1,000 for its support. The legislature further directed the State Printer to print five thousand copies of the annual report of the Association, free of charge to its members. The Association is now conducting extensive experiments in growing alfalfa, the soy bean, improved varieties of corn, oats, etc. When the annual meeting of this body is held in the State Capitol each winter, the attendance is larger than that of any other agricultural organization in the State. Mr. R. A. Moore, Angrono-

mist of the Station, is able, through this Association, to almost instantly and completely come in touch with the whole farming community of the State, and thereby matters of importance and usefulness at once find a vast audience."

When these words were written the College of Agriculture was entering upon a new phase of its development. During the preceding decade it had expanded so as to occupy practically all of South Hall; had accumulated an array of lands and barns; had acquired two substantial buildings, Hiram Smith Hall and the Horticultural-Physics Building, besides a greenhouse, a residence for the dean, a central heating plant, and numerous minor structures. Finally, in 1901, the legislature voted $150,000 for an Agricultural Hall, adding two years later, $25,000 for fittings, and the building was occupied in the autumn of 1903. Yet thus far the activities of the college had been almost exclusively along the lines of research and extension just noticed. At no time had there been a dozen students of collegiate grade pursuing a course in Agriculture. When the central building was voted there were but six students in the Long Course. The new building was an impressive structure, 200 feet in length, 64 in depth, and four stories in height, with an octagonal annex in the rear, 66 feet in diameter, containing a library and reading-room on the first floor, and an audience room seating nearly a thousand persons, on the second. To those who saw only the present, the quarters seemed commodious indeed for a small band of investigators plus three or four hundred young farmers who received instruction each winter. But the vision of its projectors was soon justified; the preliminary work had been done, and the time was at hand. Before the building was ready for occupation, students

of collegiate grade had multiplied from six to sixty and the officers of the institution were already referring wistfully to the days when the professors in this department had been privileged to devote almost their entire energies to research. Twice, in this period, serious mishap had threatened: once when in 1895-96, the New York Experiment Station tried to carry off Dean Henry and Professor Russell, and again in 1895-97, when there had been a strong movement in the legislature to separate the College of Agriculture from the university and remove it to another location; but wise action by President Adams and the regents had averted both disasters. The year of Jubilee rolled round and found no part of the university planted more four-square with the future than the College of Agriculture.

The development of the special colleges constituted one phase, and an important one, of the transition from college to university. Equally fundamental were the changes wrought in the central College of Letters and Science. Here again the university is indebted to the initiative of President Chamberlin. Had he, in his sympathy with natural science, elected to give the institution a powerful impetus in this direction, it could not have been considered remarkable. Nearly half a million dollars had just been expended by the state for the new group of science buildings and the nucleus of a strong scientific faculty had already been collected. The opportunity for a special development was obvious. Nothing in Chamberlin's administration, therefore, is more noteworthy than the largeness of spirit in which he set about it to strengthen the humanities. But he saw with great clearness that, if the humanities were to be maintained in competition with science, they must be reanimated by an infusion of as much of the modern spirit as was com-

patible with their nature. "The remarkable advance which the natural sciences have made in recent years as educational factors," he wrote in his earliest *Report*, "has been dependent very largely upon the laboratory and field methods which have given them vitality and effectiveness. Parallel methods in other departments of study undoubtedly mark a coming era of vigorous growth and commanding influence." When he surveyed the university for signs of its "intellectual tendencies," as he did in a thoroughgoing statistical analysis of the instruction actually given, he found no undue emphasis upon physical science so far as concerned the subjects taken by students. With the faculty it was different. Investigative science was already strongly entrenched in the laboratories manned by Irving and Van Hise, by Birge, and Barnes, with whom would shortly be ranked several scientists at the Experiment Station and Comstock at the Washburn Observatory. But in the humanities the teaching was still largely of the older type. Whenever, therefore, an opportunity offered, new men were brought in who had shown a turn for investigation. They were usually, perforce, younger men, products of Johns Hopkins, or of foreign study, or both. To a chair of Experimental Psychology, then a distinct novelty, came Jastrow in 1888; two years later came Haskins in History, and, the year after, Hendrickson in Latin. These were all Johns Hopkins men, as were Hubbard in English, and Ely and Scott in Economics who were added to the faculty in 1892. Indeed, the preponderance of Hopkins men in the younger faculty is said[1] to have given considerable food for thought to President Eliot of Harvard when he visited Wisconsin during Chamberlin's administration.

[1] By Dr. Chamberlin in a conversation with the author.

Besides the addition of new men to the faculty, there were two closely related changes in the College of Letters and Science; the modification of the courses of study and the introduction of graduate work. The type of education produced by the old "liberal" college course, Dr. Chamberlin has said, involved a spreading-out process which may be likened to a tree, which, as it grows spreads outward in wide-branching, dispersed, graceful limbs and foliage. But there is another type of tree, as the pine, which keeps straight on to a point. The last he thought of as another possible way of finishing a course, not to be required of everybody, but useful and deserving development. To this end the old courses, such as the classical and scientific, were more scrupulously differentiated each in its particular sphere. During Bascom's last year the General Science Course had been relieved of those students who followed it chiefly to escape foreign language requirements, by establishing an English Course. The General Science Course was now strengthened and in addition a special Pre-Medical Course was organized within it. The English Course, in turn, became a catch-all for undesirables and, just at the end of Chamberlin's term, this was modified so as to make it more distinctively a course in English language and literature. Coördinate with this, the Civic-Historical Course, which had been introduced as a modified form from the English Course was developed into a full and independent course. At the same time, "for the purpose of permitting greater concentration, continuity, and thoroughness in the leading lines of study" the Group System was adopted, providing a basal group of required studies in the first two years and a "major" study running through the last two years of the course. The general purpose of this system, it was announced, was

"to introduce university methods, in the modern sense of the term, more largely in the undergraduate college course, and so prepare the way for the better development of graduate work." Other innovations in relation to undergraduate studies were the over-hauling of the "class officer" system of faculty advisers and the establishment of the baccalaureate thesis. The aim of the last was to gather the student's energies to a focus on some special subject at the end of the course. It will be seen that the differentiation of "Courses," as well as the introduction of the Group System, prepared the way for the growth of advanced subcourses and thus for more intensive study within the boundaries of the several departments.

The first formal step toward the encouragement of graduate work was the foundation, in Chamberlin's first year, of eight university fellowships, to which a ninth was added through the private generosity of John Johnston of Milwaukee. The annual stipend of four hundred dollars which was provided seems small enough now; but in those days, it was counted a substantial prize and, together with the honor that was thought to attach to it, was sufficient to induce many talented graduates to continue their studies and eventually to enter academic life, who, had this inducement been wanting, would have found their way into other occupations. This was to become of no little importance in building up the faculty. Hitherto only here and there a graduate of the university had joined the academic profession. Able students with a penchant for History and Civics usually took up law. A few of Dr. Birge's "star pupils" in Biology distinguished themselves in medicine,—notably Robinson '78, Favill and Dodson of '80, and Ochsner '84. The fact that, in 1885, Wisconsin ranked

fifth among the colleges of the country in the number of its graduates enrolled at Johns Hopkins is evidence that the movement toward graduate work had already begun. But, except in the Law School, which had always drawn liberally from its own graduates, the proportion of alumni in the faculty was not large. Of twenty-two professors appointed to the regular faculty under Chamberlin, all but five were brought from the outside. Of those promoted, however, four had grown up within the institution, namely, Williams '76, in Hebrew and Hellenistic Greek, Hoskins '83 in Mechanics, Turner '84 in History, and Kremers '88 in Pharmacy. The two last had taken the doctorate away from home, Turner at Johns Hopkins and Kremers at Leipsic. Slichter in Mathematics had been imported as an instructor. Among the graduates of a decade past, Van Hise '79 had just been advanced to a professorship in Metallurgy; Olson '84, in Scandinavian, attained the professorship under Adams: Miss Sterling in German, Miss Gay in French, and Miss Allen in Latin have given long and substantial service in their respective departments. H. H. Powers '82 in Economics, Cajori '83 in Mathematics, Florence Bascom, B.A. '82, B.S. '84, in Geology, Pammel '85 in Botany, made academic careers elsewhere.

These were but scattering contributions to the ranks of scholarship and higher teaching. Entrance to the profession was not easy. Except in one or two departments the subdivision of classes had not yet become necessary. The enlargement of the lower faculty began in the last year but one of Chamberlin's term. With the initial inducement of the fellowships, with better facilities for advanced study, and with the widening of the lower footholds in the profession, there was an immedi-

ate change. Fourteen out of twenty-seven instructors appointed by Chamberlin were already on the ground, and among the five classes that graduated under him between thirty-five and forty men and women can be counted as having definitely espoused the academic life. Some of these failed to advance and drifted into secondary teaching or into other occupations; most of the women succumbed to matrimony; but a fair proportion of the men reached the higher ranks of the profession, and not a few became permanently identified with the institution or won their spurs in its service.

Of Chamberlin's first class, '88, Russell is now dean of Agriculture, and Kremers director of Pharmacy. J. A. James in History, E. R. Johnson in Transportation and Commerce, K. L. Cowdery in French, John L. Van Ornum in Civil Engineering found careers elsewhere. Richter '89 was with the College of Engineering for twenty years; Mary F. Winston finished Ph.D. (Mathematics) at Göttingen; J. H. Powers became professor of Zoölogy at Nebraska. From "Mighty '90," Cairns in English, Maurer in Mechanics, L. S. Smith in Surveying and W. M. Smith, librarian, are still with the university; Decker has been mentioned in connection with Dairying; Townley, Astronomy, is at Leland Stanford; Bruce is dean of Law at North Dakota; R. H. True, Pharmacognosy, transferred from the Wisconsin faculty to the Plant Bureau at Washington. Of the class of '91, McNair, Mathematics, now president of the Michigan College of Mines, Cheney in Botany, Kelly in Hebrew, Sanford in History, Urdahl in Economics, have had longer or shorter connections with the institution. The class of '92 is represented in the faculty by Kahlenberg, chairman of the Chemistry Course, by assistant-librarian Dudley, and by Pyre in English;

Libby and Running in History and Mathematics were with the faculty for a time; Ten Eyck has been connected with several agricultural institutions; Reinsch was head of the department of Political Science until appointed minister to China, at the beginning of President Wilson's first term. Upon the establishment of the fellowships the university announced itself prepared to confer the degree of Doctor of Philosophy and Van Hise was its first recipient (1892). With very few exceptions these men began graduate study as fellows of the university, and a number proceeded to the doctorate at home, but broadly speaking, they who changed climate for a part of the graduate period, followed the more fruitful course.

The rapid expansion of the middle faculty under Adams was indicative of a reasonable liberality in initial promotions. Out of about fifty assistant-professors appointed during the next decade, some thirty were promoted from instructorships, and during the same years twelve of the local faculty were promoted to professorships as against fifteen who were called from abroad to the same rank. As graduate work developed it became possible to hold men in subordinate positions during a prolonged course of graduate study, and conversely the employment of large numbers of instructors and assistants acted as an indirect subsidy of graduate work. Many of the early seminaries could hardly have been maintained, indeed, without this support. But the rapidity with which the lower ranks expanded in proportion to the upper faculty indicates that promotion was becoming more difficult. So far as this was the result of more exacting standards it cannot be criticised; but it is to be feared that the explanation is, in part at least, economic. Too frequently the bar to promotion

was the money consideration. And, in this respect, the wide jump, at that time, lay between the assistant-professorship and the professorship. A promotion from intructor to assistant-professor often involved only a hundred dollars or so; while the next advance involved from several hundred to a thousand dollars. Under these circumstances the assistant-porfessorship became a *pis-aller* for men of considerable attainments and usefulness. Whether justly or not, too many of the middle faculty felt that they were exploited in favor of the material expansion of the university, and sometimes that they were unfairly treated in comparison with men brought from abroad. More frankness and severity in guarding the initial approaches and more liberality in the use of the professorship, or at least of the associate professorship, would have constituted a juster policy. But these were after all only the growing pains of a rapidly developing organism. It cannot be said that discontent in the faculty was at any time a serious malady. It soon came to be understood that an instructoral appointment was no pledge of a permanent career, and that, even where there was initial promotion, only those who showed exceptional capacity or who were exceptionally shrewd or fortunate in the pursuit of a specialty, might look for rapid advancement. In its broad workings, moreover, it is questionable whether the slowness of promotion for which the Wisconsin faculty became notorious was not less an indictment than a distinction.

The establishment of the Graduate School of Political Science and History, under the directorship of Dr. Ely, marked the culmination of Chamberlin's programme for developing the "new humanities" and introducing university methods into the liberal college. It was, indeed,

one of the boldest and timeliest strokes ever made by a president of the university. The genius of the conception consisted partly in the manner in which it made use of elements of strength already present, but hardly more than latent, in the central college. The popularity of the new Civic-Historical course had indicated a keen undergraduate interest in the subjects of this group. In fact, the university already possessed a strong tradition of historical study. The most creative scholar of the faculty, on the side of the humanities, had been, the professor of History. Allen had produced no monumental work; but he was a fertile and original writer on historical subjects, wide in range, exact, delicate, and far-seeing. Although much of his work was critical—he was for many years the regular historical reviewer of the *Nation*—he had made substantial contributions to knowledge, chiefly on the subject of village communities and land holdings. His essay on *The Place of the Northwest in American History* contains the germ of the thesis which was afterward more explicitly and robustly developed by Turner in his *Significance of the Frontier in American History*, and which has become a salient principle in the interpretation of our national development. Under Allen's influence a spirit of investigation had been fostered among the students in his department, of which one expression had been the formation of a History Club. Professor J. C. Freeman declared, at the time of Allen's death in 1889, that his classroom had been for a decade the scene of instruction to undergraduates which might well have been imparted to the brightest and best-prepared minds in the country. To Allen succeeded Turner, who was vigorously carrying modern seminary methods into the utilization of the splendid collections of the Sate Historical Society; and

with Turner had been joined C. H. Haskins, in European History, already regarded as the most brilliant of the recent products of Johns Hopkins.

All things go back to men. But, in the domain of historical research, much depends upon books. In this respect the university was peculiarly fortunate. As early as 1880, the availability of "the valuable property belonging to the State Historical Society" had suggested to the board of regents the project of a "College of History." The accumulation of this property had been primarily the work of Lyman C. Draper, the first secretary of the society. Through his foresight and indefatigable singleness of purpose, historical sources had been collected which, in extent and importance, surpassed anything west of the Alleghenies, and, for certain phases of western exploration and expansion, were universally unrivaled. The project of placing the library of the Historical Society beside that of the university in a single building to be erected on the campus, was said by Dr. Thwaites to have been first suggested by President Chamberlin, "late in 1891." The project was revived under President Adams and pushed to a successful consummation, and thus the nucleus of a great liberary became substantially an asset of the university.

Closely allied to the interest in historical study, in undergraduate thought, was the interest in contemporary questions of public policy. Undergraduate interest in this direction had manifested itself in a peculiarly vigorous development of the so-called "Literary Societies." These were primarily debating organizations, whose activities focussed in their annual Joint Debates, preparation for which often constituted, for the participants, the main work of an entire year. So intense was the

spirit of rivalry, indeed, that a whole society was frequently mobilized for the collection of data bearing upon the subject of the debate. Thus, a Joint Debate virtually resolved itself into a pair of seminaries for the exhaustive study of some question of public import. As for the champions, they were the pick of the college, and supremacy in debate was looked upon as the most likely promise of future leadership in affairs. That the men of a state university should be vitally interested in the study and discussion of questions of public policy seemed natural and appropriate. The new school of Political Science and History had the assurance of strong undergraduate support from the start.

But the large forward step consisted in the bid that was made for a patronage beyond undergraduate boundaries and outside the state; and this was gained, in the first instance, through the reputation of the director. In fact, the formation of the school was doubtless dictated, in part, by the necessity of justifying the salary of Dr. Ely who, in this respect, was placed on a level with the deans of the colleges. Dr. Richard T. Ely, then head of the department of Political Economy in Johns Hopkins University, was one of the most progressive of the younger group of investigative economists which had come into being during the last few years. Professors Turner and Haskins had been his students at Johns Hopkins. Through them, and especially through Professor Turner, the president was led to suspect that Dr. Ely would not be unwilling to transfer to Wisconsin, provided opportunities were offered for a powerful development of graduate work in his subject, since it did not seem likely that the means for such a development could be found at Johns Hopkins in the immediate future. It was an audacious idea. The

emphasis which it was proposed should be thrown by a state university upon research and graduate study was the more startling because of the subject of that emphasis. Dr. Ely was considered radical and even, in some quarters, rather dangerous. In his discussions of the Marxian socialism which, hitherto, had had little academic recognition, and in his labor investigations and his strictures upon corporative abuses, he had ventured on burning ground. His colleagues in the East were freely of the opinion that he could not "last a year" in a western state university. Nor was the test long on the way. In the summer of 1894, at a time when the air had been electrified by serious labor disturbances in the Middle West, a contest was precipitated by an open attack upon Dr. Ely. Oliver E. Wells, superintendent of public instruction, and *ex-officio*, a member of the board of regents, in a letter published July 12, in the *Nation*, and republished two days later in the New York *Evening Post*, accused Dr. Ely of misconduct in connection with a printers' strike at Madison, and incidentally pretended to expose the heretical and seditious tendency of his teachings. The author was well known as a breeder of dour suspicions, a narrow and unfair critic of the university, whose position on the board was accidental and anomalous. The regents determined to sift the matter to the bran, and, as they little doubted, thoroughly make an end of Wells and his kind. A committee of investigation was appointed consisting of H. W. Chynoweth, John Johnston, and H. B. Dale. There was a formal trial of Dr. Ely, presided over by Regent Chynoweth. The result was a *débacle* for the accusers and "a complete vindication of Dr. Ely and the teaching and practises of our university." The findings of the committee were published in broadside and Dr. Ely

was tendered a public reception by the citizens of the town in recognition of his personal triumph.

Though but a nine days' wonder in itself, this affair elicited from the board of regents the following declaration in behalf of academic freedom, which has come to be regarded as part of the Wisconsin Magna Charta:

"As regents of a university with over one hundred instructors supported by nearly two millions of people who hold a vast diversity of views regarding the great questions which at present agitate the human mind, we could not for a moment think of recommending the dismissal or even the criticism of a teacher even if some of his opinions should, in some quarters, be regarded as visionary. Such a course would be equivalent to saying that no professor should teach anything which is not accepted by everybody as true. This would cut our curriculum down to very small proportions. We cannot for a moment believe that knowledge has reached its final goal, or that the present condition of society is perfect. We must therefore welcome from our teachers such discussions as shall suggest the means and prepare the way by which knowledge may be extended, present evils be removed and others prevented. We feel that we would be unworthy the position we hold if we did not believe in progress in all departments of knowledge. In all lines of academic investigation it is of the utmost importance that the investigator should be absolutely free to follow the indications of the truth wherever they may lead. *Whatever may be the limitations which trammel inquiry elsewhere we believe the great state University of Wisconsin should ever encourage that continual and fearless sifting and winnowing by which alone the truth can be found.*"

This noble statement of principles no subsequent government has had the hardihood to retract. A bronze tablet, bearing the final sentence, was presented to the

university by the class of 1910 and, after some controversy, was affixed to the walls of University Hall, at the left of the main entrance.[1]

The decade which followed was to witness rapid progress toward a more scientific and conscientious management of civic and economic affairs. The amelioration of the lives and living conditions of the working classes, the cleaning-up of municipal abuses, the renovation of penal and charitable institutions, the readjustment of public finance and the redistribution of taxation, the government control of corporations and public utilities, were all to receive, in the near future, a new kind of attention. The intelligent solution of these and many other problems would require the collection and digestion of much scattered information and would require, too, a wide dissemination of knowledge and an awakening of the popular conscience. There lay before the new school a large opportunity of which it was not slow to take advantage. On the basis of its public service in fostering "those studies which tend to raise the standard of good citizenship," an appeal was made for contributions from private sources for the purchase of necessary books and for the securing of eminent lecturers on special subjects. Dr. Ely himself gave courses of lectures in many of the large cities of the East and Middle West, devoting the proceeds to these purposes. Many thousands of dollars were thus added to the sums which the university was able to devote to the purposes of the school. Among the special lecture courses maintained by private gifts, one by Dr. A. G. Warner, on charities, and another on crime by Dr. Frederick H. Wines, were among the earliest and

[1] The sentences were written by President Adams, though they have sometimes been ascribed to the chairman of the committee which reported them to the board of regents.

most significant. Each became the basis of an important volume: the first, of Warner's classic on *American Charities;* and the second of Wines' *Punishment and Reformation.*

A spirit of productiveness and the habit of publication were characteristic of the school from the start. Dr. Ely was a prolific author and a busy editor. His reputation, combined with that of the History department and the fame of the historical collections, drew students from considerable distances. Around Ely's first seminary table in the second story of the Fuller Opera House, and then in the Law Building, and in Turner's seminary at the Historical Library in the old Capitol, were gathered graduates of many Western and of some Eastern universities. The fellows of the school were chosen each year from a large field of candidates representing all parts of the nation, and were usually men well advanced in their graduate course who were pressing on to the completion of their dissertations. More than half the doctorates conferred by the university during these years were taken by students of this school. The "Economics, Political Science and History" series of university *Bulletins,* edited by Professor Turner, provided a ready means of publication for maiden efforts. Throughout the Adams period, the men of this group led the university in published evidences of productive scholarship. The faculty of the school took a prominent part, also, in the University Extension movement which was inaugurated in Chamberlin's last year, so that the work of the school was soon widely known, not only in professional circles, but among the people of the state. Its graduates went forth into the faculties of other colleges, into "social settlements" and other humanitarian institutions, and

in course of time into various branches of the public service. Successful academic careers such as those of David Kinley at the University of Illinois, C. J. Bullock at Harvard, and E. D. Jones at the University of Michigan, and the winning of important public appointments such as that of B. H. Meyer to the State Railway Commission and, later, to the Interstate Commerce Commission, and of P. S. Reinsch on the Pan-American Conference and as minister to China, are indications of the distinction attained by some of the early products of the school.

After eight years of successful activity the school began to disintegrate. In 1900, Professor Scott was drawn off to become director of the newly-established School of Commerce and, the same year, Professor Turner was advanced to the directorship of an independent School of History. A year later, Reinsch was made head of a distinct department of Political Science. A series of changes in personnel began with the loss of Haskins (to Harvard), in 1902. A change of nomenclature was adopted soon after President Van Hise's accession, and, with one or two exceptions, all of the so-called "schools" disappeared. The School of Political Science and History had had its day and served its purpose.

Graduate work had become an accepted part of university effort. Each of the literary departments had its small group of advanced students, its departmental seminary, and its modest programme of research. The number of graduate students in the university had increased from four to twenty-two under Chamberlin and now exceeded one hundred. During President Adams' administration the old text-book type of recitation was gradually displaced by the lecture and quiz method of

instruction, supplemented by use of source collections and library references, with independent studies and reports by members of the class. In some cases the new methods were too advanced for the students involved and there was some confusion in consequence; but they represented, nevertheless, a distinct advance in the technique of imparting and acquiring knowledge. Undergraduates were taught the use of the library, and the advanced undergraduate courses were developed so as to lead up to the graduate work, both in subject matter and in method.

The transition in methods was coincident with the increase in student numbers and the changes in the constitution of the faculty which have been noticed. The elementary courses in languages, English, mathematics and laboratory subjects were the first to be subdivided and, with the multiplication of advanced courses, elementary instruction fell almost entirely into the hands of younger instructors. Thus, in 1898, the work in English Composition was reorganized under the direction of Professor Hubbard, the Harvard " theme system " was introduced, and a corps of instructors was employed specifically for this branch of teaching. Similarly in mathematics, languages, and laboratory subjects, the student's contacts in his elementary courses came to be very largely with the younger members of the teaching force. In many courses of advanced and intermediate grade, classes became too large for the successful application of the old "question and answer" style of teaching, and thus was hastened the obsolescence of the older type of class-room teacher. Probably some of the best and some of the worst teaching in the university was to be found in over-grown classes of this kind during the transition period.

Four teachers of the time will stand out in the minds of alumni as representative in their several ways of something distinctive in the vanishing order. John W. Stearns in Philosophy and Pedagogy, John C. Freeman in English Literature, W. H. Rosenstengel in German, and David B. Frankenburger in Rhetoric and Oratory, were all teachers who made lasting impressions on a large number of Wisconsin students. The service of Stearns began toward the end of Bascom's term; his influence passed its height in the later nineties and he retired in 1904. The last three joined the faculty in the middle of Bascom's administration and their prominence waned as the university waxed, near the end of the Adams period. Rosenstengel's service was terminated by death in 1900. Professor Freeman was absent on a diplomatic mission to Copenhagen for three years, between 1899 and 1902. The world moved during his absence, and he never regained his former hold upon the interest of the college. Professor Frankenburger died in 1906.

Stearns was an advocate and a master of the "Socratic method," applying it effectively in classes of eighty or a hundred students. The power of testing the student's knowledge, disciplining his faculties, and developing a topic, in one and the same exercise, he had to a remarkable degree. This was accomplished with precision and rapidity. Each member of one of these large classes could expect to be called to his feet every third recitation. If his answer revealed lack of preparation or total want of insight, he speedily recovered his seat. If, however, the reply was tangential, the student was skilfully maneuvered until he had worked the matter out and was able to see and state it clearly. No teacher I have seen at work, with the possible exception of Dr.

Birge, has equalled Stearns in conveying to his students the ability to see the implications of a text and to advance a subject by process of reasoning.

Where Stearns sharpened the student's faculty in the pursuit of truth, Freeman intrigued him with admirations of wit and grace. In this case the texts examined were the choice masterpieces of English literature and above all of English poetry. Not a scholar in the modern sense, Freeman had abundance of learning, discursive and exact, wherewith he embroidered every text. His method lay less in calling out the energies of the pupil than in enriching them through the pouring forth of his own knowledge and fancy. His class-room was the home of leisure and delightful contemplation. After the intoning of an exceptionally noble passage, the teacher often remained for some moments gazing dreamily out of the window, in a pause during which the very presence of beauty seemed to pervade the room. Or reverie would give way to liveliness and anecdote, or intensify to eloquence. It was a purely personal method, if method one may call a manner which relied so much upon temperament and inspiration. When these failed, all failed; but hundreds of Wisconsin students owed to this teaching their first effective introduction to the charms of polite literature and urbane learning.

Rosenstengel met fewer students than the others; but there were few indeed of those whom he met that ever forgot his hours of inquisition. He did not inspire affection or even admiration; in some of those whom he most egregiously bullied he doubtless planted opposite sentiments. Yet there was a certain nobility and an element of culture in his flashing intolerance of slovenliness or ineptitude in the work of his pupils. As for af-

fection, the teacher who most inspired that feeling was Frankenburger. If ever a teacher "spent himself" upon his students, it was "Frankie." He was almost too patient with crass ignorance, awkwardness, and folly. "I can see how that might be," was his stereotyped class-room utterance. This, and his kindly, expectant manner drew light from the dullest corners. But his most important field of labor was outside the class-room. Merely to enumerate the directions in which he gave his service to groups and individuals would require a paragraph. Day and night, he crucified time and energy for the benefit of aspirants, promising and unpromising, in oratory, dramatics, and debate. The cruel multiplication of these activities toward the end of his life submerged him and wore him out. He never complained. Grateful remembrance of him unites the men of seven college generations.

Each of these was a teacher of the earlier type, such as Dr. Birge once characterized as needing no equipment except "a room where he could meet his students and a place to hang his hat." The new type of teacher was far more dependent upon appliances and peculiarly for the humanities, new and old, this meant an abundance of books. The inadequacy of the library impressed President Adams, at first glance, as the most glaring deficiency of the institution. More thorough investigation modified, but did not essentially change his opinion. The expenditure for the library in Chamberlin's last year had been a trifle over three thousand dollars; this was nearly trebled during the very first year of Adams' management. But nothing revolutionary could be accomplished in building up a library until larger and more suitable quarters were provided. A movement was immediately set on foot to secure from the state the

means for erecting upon the Lower Campus a suitable fire-proof building, to which might be removed both the general library of the university and the collections of the State Historical Society, as well as the special library of the Wisconsin Academy. The proposal to make this a joint enterprise was accepted by the Historical Society early in 1893. An appropriation of $420,000 for the purpose was proposed in the legislature that winter, but failed to carry. Two years later, there was granted a "preliminary appropriation" of $180,000 which was biennially augmented until the completion of the building (the northwest wing excepted) at a final cost of $750,000. The building was occupied in the summer of 1900. From what hazards its contents had been removed was convincingly shown when a very few years later, the old State Capitol was gutted by fire.

The Library stands, as it should, in the university foreground, not more as to location than in dignity and æsthetic aspiration. In its exterior design and decoration, and in its materials and appointments throughout, fewer concessions to economy were made than in any building which has been erected by the state, except the new State Capitol. That the building was secured so early is due in considerable measure to the enthusiasm of President Adams, who was influential in securing the consent of the Historical Society to the joint enterprise and in obtaining from the legislature the means to carry it out. Many regard it as peculiarly the memorial of his administration. During the five years that it was under construction, he served on all the important committees connected with the building and "took a deep interest in the architectural details, especially of the exterior." One of his last public appearances was at the dedication of this building, which may well stand as the

material symbol of the progress of the university under his leadership. For the new Library, with its stately exterior, its marble floors and stair-cases and rich yet pure decoration, its spacious reading-room, its separate suites for periodicals, for maps and manuscripts, documents, newspaper files, departmental seminaries, its cataloguing and administration offices in either wing, its museum floor, and its ample, clean-shelved, well-lighted stacks—to those acquainted with the former quarters of either collection—seemed to represent a fifty years' leap of civilization.

And the Library was only the most conspicuous example of improvement in the exterior surroundings which were henceforth to lend comfort, convenience, and brightness to the pursuits of teacher and taught. The acquisition of the Gymnasium, in 1894, gave a new character to the physical and social habits of the university population. It was like the addition of both bath-room and drawing-room to a house that possessed neither. The next year Camp Randall (through the prompt action of the president and regents acquired from the county Agricultural Society at the ridiculous price of $25,000) was dedicated to athletics and equipped with a new playing field and running track and a covered stand. The Boat House had been erected through student initiative two or three years earlier and provided facilities that had been sadly wanting for the enjoyment of the lake. The regents added a rowing tank for the use of the crews, in 1897. In 1896 Ladies' Hall was rebuilt and much enlarged and its appointments greatly improved, especially in the addition of a gymnasium for women.

All of these improvements, it will be noticed, were for the comfort and recreation of the student outside the

class. None of the building operations of the first six years of President Adams' administration made any appreciable addition to the rooms for instruction available to the central departments of the university. By this time the literary departments had far outgrown the quarters provided for them in University Hall. Many large classes were compelled to migrate to Science Hall, where the Science and Engineering courses were already elbowing one another rather savagely, or to the Law Building, or to join forces with the "Agrics" in South Hall. Probably the inconvenience of such arrangements was more serious than were their frequent incongruities. Yet, whilst unfolding the charms of Keats or the Categorical Imperative, to be conscious of the bleached skeleton of a horse on the left, and a highly colored model of the bovine extravagance in stomachs, on the right, had its intangible disadvantages. The remodeling of University Hall and construction of the South Wing, in 1899, more than doubled its capacity and greatly relieved the congestion and jostling of classes, while making it possible to supply members of the literary faculty, most of them for the first time, with private offices. The completion, soon afterward, of the new structures for Engineering and Agriculture already noticed in appropriate connections, still further facilitated the congenial grouping of departments. The new scale of magnificence upon which the state so quickly learned to deal with the university helped Governor Peck to his witticism, that he had never gone through the university but that the university had gone through him for a million dollars. All told, about a million and a half was expended for buildings in the ten years between 1893 and 1902.

That the improvement in externals and especially in

THE HISTORICAL LIBRARY

recreational facilities, upon which the preceding paragraphs have laid an almost indecent emphasis, should be associated with the administration of Adams is not at all an accident. It is one of those coincidences between a general tendency and the influence of a particular leader which we frequently encounter in social history. Though he by no means fell short in appreciation of the true inwardness of learning, President Adams attached far more importance than either of his immediate predecessors, to the amenities of university life. Stevenson's observation, that it is no mean part of a gentleman's education to know a good cigar, might not have scandalized him beyond all measure. His stipulation, at the time of his appointment, that an annual allowance of five hundred dollars for entertainment, be appended to his salary, produced a raising of eyebrows in some quarters, and the twitter excited by the sounds of busy carpentry at the President's House, the summer before his arrival, was not confined to the birds. With the aid of Mrs. Adams, whose private means and social gifts contributed to this end, the new head exercised a hospitality quite beyond what the university had known or has ever known. There were homes in the city of equal or greater taste in entertainment, but they had been very sparingly accessible to the members of the university. On Friday nights the President's House was "open" and people actually went and went in great numbers. To many, students and faculty alike, whose lives had been barren of material refinements, the possessions of the house, its books and trophies of European travel, its table, and the subjects and manner of its conversation shed a new light upon social intercourse.

Until ill-health, first of one and then of both, curtailed their social activity, the president and his wife

were often seen in public. They had the happiness, moreover, of making their presence at a public function seem the effect of a vital interest rather than a perfunctory official appearance. A good play was quite certain to bring them to the theater. Any form of cultivated recreation received the encouragement of their patronage or their hospitality. It was to extend and elevate the appreciation of music, primarily, that the School of Music was organized in 1894, and the formation of the Choral Union was directly due to the president's influence. One of the warmest desires of President Adams was to hear more singing amongst the undergraduates. "A great university is a singing university," he frequently said. In some measure he had his wish, for student singing increased very noticeably during his time and, with one or two exceptions, all the best Wisconsin songs date from that period. In all spontaneous activities of the undergraduates, their social recreations, their athletic contests, their dramatic and literary endeavors, the president and Mrs. Adams took an affectionate and unaffected interest, desiring only that these might be controlled toward their legitimate objects of actually enriching the life of the university and refining its manners. The buoyant spirit which characterized student enterprises under this encouragement has already been touched upon and will find larger space in the succeeding chapter, which presents in some detail the social changes and the rise of student "activities" that centered in this period.

In the autumn of 1901, President Adams and his wife bade the university farewell, seeking restoration for both in the gentler climate of California, but for both in vain. President Adams died the following July, and Mrs. Adams a few months afterward. In taking leave of the

university they left as earnests of their regard, President Adams his private collection of books, which he presented to the University Library, and Mrs. Adams a large number of charming objects illustrative of the household art of foreign countries and cities, which were transferred from her house to the Historical Museum. In addition, Mrs. Adams distributed amongst her university friends many cherished belongings,—busts, sets of books, furniture, linens, and the like, as tokens of a continued interest in their welfare. But how devoted was the affection which these two had come to cherish for the university of their adoption was not fully known until death had claimed them and it was learned that substantially the entire estate of both had been bequeathed to the university for the endowment of fellowships in English, Greek, and Modern History. It was the most considerable and inspiriting benefaction the institution had received at private hands, since the gift of Governor Washburn. The proof that those whom it so highly regarded had thought of and wished it so well, heartened the university in pledging itself anew to the best of the faith that was in it.

XI

STUDENT LIFE

After the dormitories ceased to be adequate, and were finally abandoned so far as the men were concerned, Madison became, for the average undergraduate, a wilderness of boarding-houses and scattered, unorganized rooming places. Student initiative produced the "boarding-club," modelled after the old coöperative messes of the dormitories; but these were usually dreary affairs of little social interest and ruinous cuisine. Occasionally, by maintaining a superior table and by care in the selection of members and of the annual "steward," a club prolonged its existence for several years and gained a certain social distinctiveness. Such was the "Pickwick" club which continued well into the nineties. But in most cases, the club was an ephemeral organization promoted by some enterprizing citizen of the student community whose main qualification as a caterer was a masterful ambition to procure free board.

These conditions fostered the growth of the Greek Letter Societies. A chapter of Phi Delta Theta had been established before the Civil War; but the existing foundations began with the formation of a chapter of Beta Theta Pi in 1873. Five others followed during the Bascom period, viz., Phi Kappa Psi in 1875, Chi Psi in 1878, Phi Delta Theta in 1880, Sigma Chi in 1884. Similar organizations among the women started with the installation of Kappa Kappa Gamma (1875), followed

by Delta Gamma (1881) and Gamma Phi Beta (1885). At the neighboring college of Beloit, whence they were first introduced, the fraternities were genuine secret societies, existing only *sub rosa*. They were not prohibited at Wisconsin, though Bascom opposed them with the full strength of his moral influence. By the students they were regarded, at first, as rivals of the Literary Societies; subsequent hostility was based on their social pretensions and their machinations in college politics. The " Interfrat," the most pretentious social function of the year and a forerunner of the later "Prom," was first given in Assembly Hall in 1881. Emphasis upon toilet, more elaborate decorations, music and refreshments, carriage, flowers, and the extension of the hours of dancing to 3 A. M., distinguished it from the usual "class parties." It was a source of great joy to the privileged few and of corresponding heart-burnings amongst the excluded "barbs." A Social Club with a calendar of eight dances was organized by the non-fraternity men in 1888, on the ground that the fraternities " monopolized the class dances." In 1890, the chairman of the sophomore dance was accused in the college paper of having so managed the function that only the fraternities were represented. About the same time occurred the notorious " Pepper Party,"—so called because of the means adopted by a band of unchivalrous " barbs " to demoralize a ball given for the delegates to a national convention of Delta Gamma. The warfare between " barb " and " frat " was bitterest and most ignominious in the years just before and around 1890.

In the years that followed several influences combined to mitigate this unfortunate state of feeling. The earlier fraternities were very small and clannish organizations whose significance consisted, for the most part,

in the secret rites of their " down town " lodge-rooms, their close personal friendships, and their social pretensions. The introduction of Delta Upsilon (non-secret), in 1885, and the reorganization of Beta Theta Pi, a year or two later, on a broader basis of membership, were salutary events. The chapter-house movement, which began soon afterward, might seem, at first thought, to tend toward increased exclusiveness; but it had, on the whole, the opposite effect, for it encouraged enlargements of membership and, therewithal, less bigoted criterions of selection.

The first fraternity to maintain a chapter " lodge" was Chi Psi in 1881; but this remained, for several years, little more than a rendezvous. In the autumn of 1888, however, the Betas and Phi Psis and, among the sororities, Gamma Phi, moved into rather large houses and, very soon thereafter, " a house of its own " had became the first requirement of a fraternity. The furnishing and, later, the acquisition of chapter-houses, were largely managed and financed by alumni of the several fraternities. It should not escape attention that, even to the present time, the direct contributions of alumni to the material welfare of the university and, we might add, their vital contacts with undergraduate life, have come about mainly through fraternity associations.

As might be expected, President Adams was favorable to fraternities. Not only did he prize them for the superior social advantages which they afforded a considerable number of the patrons of the university, but he was wise enough to see, too, that one remedy for the evil of fraternities was more fraternities. Hence, though he showed them no undue partiality, he certainly put no obstacles in their way. Probably it was due to other causes, however, that the fraternities increased greatly

in size and number during his régime. Membership in a fraternity soon ceased to be a badge of very marked distinction. As the university population became larger and its activities more numerous and varied, many cross-lines blurred the sharpness of the old demarcation between "frat" and "non-frat." Soon after the Armory became available, a series of "military hops" was inaugurated which helped to democratize the lighter life of the undergraduates.

But the most potent force in moderating the old class consciousness was the development of intercollegiate athletics. Many of the "honors" which had been most ardently sought, places on debating teams and on student publications, class offices, and the like, had been won in the arena of college politics and sometimes by rather unbeautiful methods. Athletic honors, in the very nature of the case, were won by performance. Social pretensions counted for little on the athletic field. Amongst team-mates and amongst the spectators who cheered them on, in a common cause, the old affiliations of "barb" and "frat" were largely forgotten. In this respect, at least, athletics had a wholesome effect upon the student morale.

Intercollegiate sports came in with a rush after 1890. Within three or four years football, rowing, and the field and track contests became the distinctive college games, overshadowing baseball and tennis, which had flourished during the decade before. There had been a baseball team as early as 1870, whose list of players contains the names of several well-known alumni. The earliest notice of an intercollegiate contest I have encountered, is a reference, in 1873, to two games of baseball with Beloit. A substantial passage in President Bascom's baccalaureate sermon, *The Seat of Sin* (1876),

is devoted to a condemnation of "athletic sports, college-regattas, and ball games," indicating that he foresaw and deprecated their introduction at Wisconsin. In 1881, the area now known as the Lower Campus was acquired by the regents, to provide " convenient and appropriate grounds for gymnastic and kindred exercises." The presence of a convenient practice field gave an immediate stimulus to competitive baseball. A systematic series of "home and home" games was inaugurated in the spring of '81, between Wisconsin, Evanston (Northwestern University), and Racine College, and there was directly organized the Northwestern College Baseball Association, comprising these three and, a little later, Beloit College. At the end of eight seasons in this company Wisconsin bragged of six " pennants."

Meantime, many of the familiar corollaries of college sport had been discovered. For a few weeks each spring there was all needful enthusiasm and excitement. Victorious teams were met at the train; parades and oratory flourished; ash-barrels and horseblocks went up in flames, and cement sidewalks were encouraged. Excursions accompanied the team to Beloit, whence, in case of victory, they not infrequently departed amid salvos of jeers, with an occasional salute of eggs. The home games were gala occasions; all the fashion and gayety that college and town could muster congregated at the Dane County Fair Grounds; every red gown and parasol was requisitioned, and the cardinal rippled from the whips and caparisons of the "showiest turn-outs in town." Banks of college rowdies "rattled the pitcher" from the base lines and monopolized the college yell. The attendant vices of betting and drinking, which President Bascom had dreaded, were by no means unknown. The former, however, resulted for the most

part in no graver abuse than an unequal distribution of pie at the boarding clubs. After an unusual victory an unusual volume of voices from the old Hausmann brewery on State Street might apprise the belated citizen that somebody was a very good fellow which nobody could deny.

Of course nobody did deny it. Baseball had its heroes, no less renowned than oratory and debate. Waldo and Connolly, classmates of '85, a formidable battery, were long the theme of impressive reminiscence. The later eighties gave to fame "Maggie" Williams of the keen eye and the shrewd head. "Taffy" Sheldon, the stone wall catcher and long hitter, "Bob" McCoy, "Jim" McCully, "Jimmie" Lund, "Babe" Pape, and many other wearers of affectionate diminutives.

As a test of college prowess, baseball had little competition at Wisconsin until 1889. Then thoughts became rife of other forms of contest and of trying conclusions with more distant institutions. The other sports had been litttle developed. There was a tennis association with about thirty members, and return matches with Beloit had begun in 1887. Local field and track contests had been held, from time to time, since 1880; rowing and football had been tried sporadically, as local sports.

All of the foregoing, except football, are fair weather games; football is a rough weather sport. The other games come naturally in the spring when the academic year is waning; the season, in our latitude, is short and the weather uncertain. Baseball, tennis, and rowing are all handicapped by these conditions. The most vigorous, the most oxygenated of games, whether for player or spectator, football thrives in rude weather and exhilarates the opening weeks of the college season. Its

alleged brutality is of a blend which has always been relished by healthy British and American youths. It unites in larger measure than any other game all phases of physical prowess, mental strategy, and moral control. With all counts against football, it is not altogether of ill omen that it should have become the typical American intercollegiate game.

If one might believe all who have given utterance on the subject, there have been several "first" football teams at Wisconsin. R. D. Mallory, of the class of '84, claims to have brought the first oval football on the campus, probably in the autumn of 1880. The late J. A. Aylward was captain of a team in 1883. In the fall of 1886 came A. A. Bruce, sometimes called "the father of football." Bruce was a familiar figure as he kicked his football about among the baseball players on the Lower Campus. There was a team organized in 1888; but so far as I can discover, the first contest with an outside team was a game of American Rugby played November 23, 1889, against an eleven representing the Calumet Club of Milwaukee and chiefly composed of graduates of Eastern colleges. Each season thereafter brought an advance in the technique of training and play, and a widening competition. In the latter respect, the foundation of modern football was the development of rivalry with Minnesota and, later, with Chicago. Michigan had challenged as early as 1887, was met occasionally, the first time in 1892, but never became a favorite enemy.

Minnesota had a head start of two or three years; its teams were always heavy and powerful, and it had the further advantage of coaching by Eastern players, of whom there were always a few living in the "Twin Cities." The team of 1890, after victories over several

of the old baseball rivals, secured a game with Minnesota near the end of the season. A defeat at Minneapolis, 63 to 0, opened Wisconsin's eyes to the possibilities of the game and gave her a score to settle for many years to come. It was not until the fifth meeting with Minnesota that she obtained a victory. Only once, under Ed Ahara's captaincy in 1891, was there a sharp contest. Wisconsin was reinforced in 1892 by T. U. Lyman of Grinnel who changed his college in the hope of realizing his chief athletic ambition, which was, to defeat Minnesota at football. The next year Parke H. Davis of Princeton served as coach and also played on the team. Both seasons proved disastrous. Finally, in 1894, Wisconsin turned the trick.

The '94 game was played on the Lower Campus, in the presence of six thousand spectators drawn from all parts of the state. Nothing approaching the event in magnitude nor in intensity of excitement had ever been known at Madison in connection with athletics. It was a desperately contended game, Wisconsin scoring the sole touchdown by a brilliant rally near the opening of the second half. The Wisconsin "line-up" on this historic occasion was as follows: quarterback and captain, T. U. Lyman; halfbacks, J. C. Karel and F. W. Nelson; fullback, J. R. Richards; center, F. Kull; guards, J. E. Ryan and G. W. Bunge; tackles, J. F. A. Pyre and W. Alexander; ends, W. H. Sheldon and H. F. Dickinson; the coach was H. O. Stickney of Harvard. Several of these were veterans, but Richards, Karel, Nelson, Pyre, Alexander and Sheldon played their last season under Phil King's coaching in 1896.

The last game on the Lower Campus marked the beginning of a triumphal era in Wisconsin athletics. The elevens of '96, '97 and '01 were all great teams, and in

the six years from 1896 to 1901 inclusive, there was but one defeat by Minnesota, the 6 to 5 game of 1900. Meanwhile Chicago had come into prominence under the able coaching of Professor Stagg; the otherwise successful teams of '98 and '99 lost to Chicago. Outstanding features of these years were the excellent coaching of Phil King and the tremendous spirit with which students and alumni "backed" their players. Their loyalty had few discouragements, it is true; yet a winning team could hardly receive ampler homage than did the over-matched eleven that held Chicago to a single touch-down in 1898.

Harmonious team work, intelligence, and an intrepid fighting spirit had more to do with Wisconsin's primacy in football, during these years, than the performance of exceptional individuals. Old followers of the game remember with pleasure the grace, no less than the phenomenal distance and accuracy, of Pat O'Dea's kicking, the unwithstandable blocking and line rushing which made John Richards the dean of Wisconsin's fullbacks, the volcanic performances of H. Cochems, the broken field running of "Ikey" Karel and E. Cochems, the diving of "Norsky" Larsen, the pluck of "Activity" Tratt, the brilliant play of Brewer, Abbot, and Juneau at end, the finished tackle play of Art Curtis; but memory warms most in recalling that indomitable *team spirit* which so often snatched victory from behind and was never more keen than when the other side was insolent enough to believe the game in hand.

The most daring undergraduate conceit of those days was the introduction of eight-oar racing. Rowing is the most arduous of college sports and the most difficult to finance. The nearest college rival was at Ithaca and indeed, eventually, Wisconsin had to go beyond the Alle-

ghenies for competition. The enterprise owed its inception in the last analysis to the perennial challenge of Lake Mendota, but in the first instance to the enthusiasm and perseverance of C. C. Case '93, who, from the hour he entered college, missed no opportunity to gain disciples for the sport of his fancy.

In the spring of 1892 a pair of eight-oar gigs was purchased with money secured by subscription, and a class regatta was held. During the summer following, an eight, made up of men selected from the class crews, defeated a pick-up crew representing the Chicago Navy, in the latter's regatta at Oconomowoc. The next spring an abandoned paper shell was purchased from Harvard and a crew composed largely of football athletes was put in practice. The first " 'varsity " eight was defeated by the Delaware Boat Club of Chicago in a close two mile race on Lake Mendota. From 1894 to 1898 there was an annual two mile race with the Minnesota Boat Club, financed by the summer hotels at Lake Minnetonka. Under the coaching of Andrew O'Dea, who brought his Australian " yarra-yarra " stroke to Wisconsin in 1895, the " varsity " soon showed its superiority in this competition, and, in the spring of '98, invaded the East, defeating the Yale freshmen by ten lengths in a two mile race on Lake Saltonstall. In June, 1899, the Wisconsin eight made its first appearance on the Hudson, finishing second in a four mile race against Pennsylvania, Cornell, and Columbia. Thereafter, the Eastern trip of the Wisconsin crews (for a freshman crew was soon included) was an annual event, until the prohibition of intercollegiate rowing, by faculty action, in 1914. Notwithstanding the difficulties which attended the maintenance of rowing at Wisconsin, only the apparently conclusive proof of its in-

juriousness to the physical constitution of the participants could have justified the banishment of this otherwise beautiful sport from the realm of intercollegiate competition.

In 1895, through the influence of Professor Stagg, a track and field meet was held at Chicago, which led to the establishment shortly after of the Western Intercollegiate. Wisconsin entered spiritedly into this new branch of competition, won the first meet, and, in 1897, romped away with a good share of the firsts, scoring 47 points to the 19 of her closest rival, Michigan. She was represented at this time by a remarkable group of athletes, including Richards in the hurdles, Kraenzlein in the low hurdles and jumps, Maybury in the dashes, H. Cochems in the weights, and Copeland in the distances. On track and field as on the gridiron, in 1897, Wisconsin "was first and the rest nowhere." To say nothing of the water!

A decade earlier Wisconsin undergraduates had been looking beyond the circle of small colleges with whom they had striven for laurels in baseball and tennis, and were demanding competition with the larger institutions of the Northwest. Now there were thoughts of claiming recognition among the older institutions of the East. In the Summer of 1897, Richards, Maybury, and Kraenzlein ran against the pick of the eastern athletes at Manhattan Field. Two years later the football team, headed by Pat O'Dea, surprised Yale in a tight game at New Haven. Between these two events, as we have seen, the Wisconsin eight had twice appeared to advantage in eastern waters. The fine showing of the '99 "varsity" at Poughkeepsie, its hard luck and good sportsmanship, won many hearts. Thereafter, for several years, the western visitors drew to their colors a

large number of unattached " rooters " at the big race on the Hudson. No doubt athletic enthusiasts overvaluated this form of " advertising." It is worthy of observation, nevertheless, that the extension of athletic prestige went hand in hand with widening recognition of the university in academic circles and a rapid increase of patronage from without the state.

It is, in our opinion, the heaviest count against intercollegiate sports that they have combined with social distractions and other frivolous pursuits to throw into the shade those voluntary intellectual activities whose honors were once the most coveted prizes of an undergraduate career. The forensic and literary tradition was vigorous in the nineties, and a goodly number of institutions yet in vogue at Wisconsin originated in those creative years. The so-called " Literary Societies " were still a dominant factor in student life. Athenæ and Hesperia had had an unbroken activity since the earliest years of Chancellor Lathrop. They had established just after the Civil War, the Joint Debates described in the preceding chapter, to which Philomathia was admitted in 1890. The long and unbroken prosperity of these societies, as compared with the many ephemeral organizations which had arisen and languished in the meantime, Professor Frankenburger attributed to their "loyalty to an ideal that places debate first, that puts attendance at literary societies and performance of duty there, above all personal pleasure, all amusement, all social obligation." Hard knocks, " the giving and taking of blows, contest, intellectual contest " had been " their very life." This austere ideal, imposed with astonishing severity, made the debating clubs for decades a distinguishable force in undergraduate life. Upon the formation of the Northern Oratorical

League in 1890-91, they sponsored Wisconsin's entrance and participation therein, and they organized a year or two later the Intercollegiate Debates.

The college paper from 1886 until 1892 was the weekly *Ægis* which, in addition to news jottings and brief editorials, filled its pages with the prize orations, commencement essays, and similar effusions of undergraduates. Its chief predecessor, the *University Press*, had been founded in 1870, by George W. Raymer and James W. Bashford. After its first year, when it was conducted as a monthly, it ran as a semi-monthly until 1882. Thereafter it ran as a weekly until supplanted by the *Ægis*. From 1881 until 1885 there was a rival weekly, the *Badger*, of which F. J. Turner was one of the editors. Upon the establishment of the *Cardinal*, the *Ægis* changed to a bi-weekly and, in 1895, became a literary monthly. Its lineal descendant was the (old) *Wisconsin Literary Magazine*, founded in 1903. As for the *Daily Cardinal*, a few imagined, when the first issue appeared in the spring of 1892, that it was anything more than a whimsical experiment. Yet the *Cardinal* was very much alive the following autumn, and its twenty-fifth anniversary was commemorated a few days after our entrance into the Great War. The *Sphinx*, the only magazine of student humor whose afflatus has survived an initial exertion or so, made its bow in the autumn of '99, accompanied—perhaps to keep the university in equilibrium—by the *Alumni Magazine*. The first Junior Annual was the *Trochos* of the class of 1885. Inability to agree with the faculty as to the content of the next year's book resulted in its suppression and, still another class failing to carry through a similar project, it remained for the class of '88 to appropriate the title liberated by the death of the old weekly and

bring out the first annual *Badger*. A book of that title has since recorded student achievements and assailed reputations annually, growing year by year more ambitious and, now and then, reversing all the jokes by bankrupting the Junior Class.

Not many of the editors and authors who originated or sustained the student publications made their mark as mature writers. For general authorship, two old *Ægis* contributors, Zona Gale '95 and Grant Showerman '96, are doubtless most widely known. Of the younger "*Sphinx* crowd," Philip Allen died too early for his certain talent to win him prominence, and Horatio Winslow, the cleverest of undergraduate authors at Wisconsin, has not made the impression he deserves to make on the general public. Berton Braley's facile talent for rhyme and rhythm is still unwearied and seems to find him a perennial welcome in newspaper columns and the lighter periodicals. As journalists, J. J. Schindler '89, an *Ægis* editor, and W. W. Young, the first editor of the *Cardinal*, have been successful, the one at St. Paul, the other in New York. In the majority of cases, the intellectual fertility which manifested itself as literary ambition in student days, in mature life has been directed into other channels, and if to the production of books, then books of a professional character.

But it is not as incubators of authorship, primarily, that the student publications are to be prized, any more than it is to be hoped that the college athlete will become a professional sportsman. They are arenas for the exercise of the mental graces and they display, when successful, the manners and sentiments of the mimic world to which they belong. So judged, the admirable college author is he who catches best the tone of the life

about him and most graciously adds to and enlivens it. Judging so, we should rate high the sprightly sketches which Floyd McClure contributed to the old *Ægis* and the bantering *vers de société*, songs, and dramatic skits that fell so lightly from him. How well he hit off the smart undergraduate's attitude to the public, in the chorus beginning:

> For we are jolly college students
> And we are out to be viewed as a sight,
> Both in our personal estimation
> And in yours we are certainly bright—

as sung by the Glee Club, the Banjo and Mandolin Clubs accompanying, in one of those concerts which seemed so brilliant and are so thoroughly forgotten! And this reminds us that much of the best writing was not for the publications at all, but for occasional uses of this sort.

The willingness of the college student "to be viewed as a sight" displayed itself in a series of tours inaugurated in the late eighties by the musical organizations just mentioned. Later the clubs saw signs that the stereotyped concert was beginning to pall upon the public, and resorted to various devices for introducing novelty into their entertainments, appearing one season (1897) in the guise of "The U. W. Minstrels." A growing activity in dramatics became pronouncedly vigorous and began to take organized form just before 1900. The practice of presenting a "senior play" as a feature of Commencement Week was started by the class of 1898. The following autumn a highly successful dramatic contest was staged at the Fuller Opera House. The winning team, composed of Walton Pyre, Louis M. Ward, Mary Freeman, and Janet M. Smith,

presented an arrangement of scenes from *Othello*. The lively interest stimulated by this event led to the immediate foundation, by the men, of the "Haresfoot" dramatic club. The women followed suit with " Red Domino," and not long afterward, the " Edwin Booth " society was organized through the instigation of Professor Frankenburger, who thought the " Haresfoot " activities too shallow. The early "Haresfoot" productions were bustling farces; " Red Domino " and " Edwin Booth" ran to more substantial modern comedies, with an occasional excursion into Shakspere.

After a time, there began to be added to the interest of amateur presentation, the interest of local subject-matter and authorship. *The Budlong Case* (1907), by Lucien Cary and George B. Hill, was a well-built farce with lyrical interpolations and much good-humored and amusing satire of local manners and persons. It was the first, and one of the best, of a series of " original " pieces, selected through competition and staged by the Junior Class, in connection with the annual " Prom." The same spring " Haresfoot " revived, for a joint tour with the Glee Club, a two-act sketch of local authorship, entitled, *The Professor's Daughter* (first given on tour in 1900). In this piece the feminine factor was supplied by disguise. Horatio Winslow's *Fate and the Freshman* came the following autumn, and, a few months later, the club's first triumph in musical burlesque, *The Dancing Doll* by Winslow and Stothard, was given on tour, all the feminine rôles, including the dancing choruses, being presented by male actors. During this fruitful year and the years immediately following, original production was carried to a pitch and volume which undergraduates of more recent times have been unable, or unwilling, to sustain.

The notice of these last ephemera of our social history has carried us forward into the early years of the Van Hise presidency. I shall not go on to record the countless interests and organizations which have continued to add to the distractions of student existence, but shall conclude this survey with a brief account of the particulars in which the activities of the recent era differ from those of former times. Their increase in mass is concretely shown in the increasingly formidable bulk of the year-book of the Junior Class. This is, of course, largely accounted for by the increase in the size of the university. But it is not the mass or number of contemporary activities which mainly differentiate them from those of an earlier time; that is a mere matter of arithmetic. The interesting difference is something far less easy to describe or explain. Perhaps the most essential differences arise out of the degree to which student activities have become the objects of faculty control and supervision.

From one point of view, the development of extra-curricular interests, which in the course of four or five college generations changed the whole character of collegiate life, furnishes an exhilarating spectacle of undergraduate enthusiasm and vitality. Had it been in the nature of the new activities to keep within temperate bounds, there would be good reason to regret that they did not continue to be what they originally were, matters purely of student concern. They provided many voluntary outlets for surplus energy and invention which were preferable to the old ones, and they were the occasion for much incidental training, under highly stimulating conditions. But moderation is not companionable with the youthful virtues. It is the usual history of undergraduate enterprises that they have in-

THE FRATERNITY PIERS
BOATHOUSE

clined to extravagance, each organization trying to outdo its rivals and each generation to eclipse its predecessor. The "rushing" tactics of the fraternities, the excessive expenditures of time and money in social entertainments, the tours of the musical and dramatic organizations, occasional exhuberances of the periodicals, even the price sometimes paid for forensic triumphs, and, above all, the abuses of athletics under student management, have all exemplified this principle. The time came when the faculty had to remind the enthusiast that the university is a place where some studying ought to be done and lay a curbing hand on extra-curricular pursuits.

About the middle of President Adams' administration the need for improved means of establishing standards of social expedience and propriety became apparent, and the office of "dean of women" was created. Miss Annie C. Emery, a woman of very distinguished qualities, was appointed to this post in 1897, and it was under her influence that the women of the university united in forming the Self-Government Association. The prestige directly acquired by the "S. G. A." did much to dignify social relations between the men and women of the institution. But many social extravagances were unaffected by this form of control and the faculty soon found it necessary to exercise a determined restraint upon social affairs, through a committee appointed for this purpose.

Although the men of the university had been accustomed for years to manage independently the student enterprises in which they were interested, a decade elapsed before a disposition toward general self-government showed much strength amongst them. Before this came about, the faculty had been constrained to assert

control over nearly all student undertakings, over those especially which involved the receipt and disbursement of large sums of money. President Van Hise, after his accession, exerted himself to arouse an interest in the discipline of the university on the part of the men, and eventually brought about a considerable degree of organized self-control; first through an informal Student Conference Committee and later by means of a Student Court. But the time had passed when anyone thought of returning to the students the responsibility for their own affairs which they might have retained if things had gone a little differently. We therefore have the quaint situation, that the students are charged with considerable disciplinary responsibility, for the repression of disturbances, control of class rushes, hazing, and the like, to which they have added the enforcement of a set of more or less puerile "traditions"; whereas the management of their more powerful and constructive interests is either taken entirely out of their hands, as in the case of intercollegiate athletics, or is carried on under very close faculty supervision.

In as much as the course of events at Wisconsin has not been substantially different from that at most institutions of its class, that course may be presumed to have been inherent in the nature of the elements involved. It is a trifle paradoxical, nevertheless, that while the university has been aspiring and advancing toward higher intellectual levels, it has been at the same time proceeding toward an increasingly elaborate paternalism over student affairs. We are forced to conclude that the magnitude and diversity of the student body have increased more potently than the maturity and responsibleness of the average student. Thus, though the formal teaching of the university is more thoroughly or-

ganized and though much of it is carried to a far higher level than formerly, the common run of undergraduates have far less scope for constructiveness and self-reliance in the activities which are expressely their own than had their predecessors of twenty-five or thirty years ago. Activities are managed more ably by mature men, of course; but they are managed for the students, not by them. This begets a tameness and conformity of spirit which robs " activities " of half their virtue.

The student interest upon which the faculty laid its hand most sternly was that whose abuses were proportionate to the excitement it inspired amongst students and alumni, namely, intercollegiate athletics. There was a faculty committee on athletics from 1889 onward; but for a number of years this committee had little part in the management of athletics except to pass upon the scholastic fitness of the participants. The business affairs connected with athletics, the management of games, the handling of receipts, the election of managers for the several sports, the hiring of coaches, the financing of trips and training table, the purchase of equipment, and the borrowing of money which these operations not infrequently entailed, were all in the hands of a student board. The board was elected by an athletic association of which any male student of the university could become a member. There was one representative of the alumni and one of the faculty on the board, also elected by the student mass-meeting which figured as the athletic association. Professors Bashford and Sanborn of the Law School gave valued assistance to the students in this connection for a great many years. After receipts became large, as a result of the growing interest of the public in football, during the mid-nineties, the opportunities for the abuse of funds became very great

and, beginning in 1899, the board employed a graduate manager. But even this did not prevent questionable expenditures and frequent financial difficulties. There were other bad practices connected with the administration of the training table, professionalism and a closely allied proselyting for players, and evasions of scholastic requirements.

The tendency toward closer faculty supervision gained a strong impetus in January, 1895, when the presidents of seven Mid-Western universities—of which Wisconsin was one—met in Chicago for the purpose of considering the regulation of intercollegiate athletics. This meeting resulted in the formation of the Intercollegiate Conference of Faculty Representatives, a combination from which the several faculties drew support in the struggle to protect athletics against the frequently misdirected enthusiasm of students, alumni, and the sporting public. Complete faculty control of athletics, together with most of the fundamental rules for their regulation which now obtain among the universities of the Western Conference, and, as a result of this influence, in numerous other groups of institutions, came as a result of renewed agitation exactly a decade later. Two special conferences, called by President Angell of the University of Michigan, met in Chicago for the consideration of intercollegiate athletics on January 19 and 20 and on March 9, 1906. The resolutions passed by these two conferences were approved by the Intercollegiate Conference and incorporated in its rules at a meeting on March 10. Among these were the rules requiring a year of residence before participating in athletics, confining participation to three years, confining participation to those who had not taken a college degree, abolishing the training table, forbidding the employment of professional coaches ex-

cept as regular members of the faculty, setting fifty cents as the maximum price which members of competing universities might be charged for admission to games, and taking the financial control of athletics out of the students' hands.

It is not generally known that the initiative for this sweeping programme of reform came from Wisconsin. The programme itself was the most immediate and tangible result of an energetic "muckraking" of collegiate athletics, which was attracting the attention of the entire country about this time. Inspired by the Chicago alumni, steps had recently been taken, at Wisconsin, to improve the administration of athletics. A committee composed of delegates of the faculty, alumni, and students had met the preceding spring and agreed upon a reorganization of the athletic board, whereby the faculty and alumni members were increased in number and were elected by the bodies which they respectively represented; while the number of student representatives was reduced and a limit placed on the proportion of "W" men who could hold positions on the board. The new organization had but a brief trial. In the autumn of 1905, the revelation of certain petty but disgraceful misdemeanors on the part of the football management, together with unworthy behavior on the part of some members of the team, aroused in the faculty a sense of indignity which led to an arraignment of the whole idea and system of intercollegiate athletics. A committee of investigation was set to work, and it was at the request of this committee, transmitted through President Van Hise, that the "Angell Conference" was called. The resulting regulations, far-reaching though they have proved to be, appeared to the Wisconsin faculty insufficient for the exigencies of the moment. A small,

" root-and-branch " party of the faculty was for complete abolition of intercollegiate contests. A much larger party favored the discontinuance, at least temporarily, of competition in football. Probably the latter policy would have been adopted except for the influence of President Van Hise and Dr. Birge, and the conversion of Professor Turner, each of whom held the view which finally prevailed, namely, that intercollegiate athletics were worthy of preservation, providing that their abuses could be abated and their function subordinated to more important features of collegiate existence. With the latter end in view, the number of football games for the ensuing year was limited to five, and " big games " such as those with Chicago and Minnesota were expressly prohibited. Thus, for the only time, in a quarter of a century as regards the first and in nearly thirty years as regards the second, Wisconsin, in 1906, did not meet upon the football field either Chicago or Minnesota.

This little blank in the athletic record, trivial in itself, is salient in that it marks the termination of an era in Wisconsin feeling and tradition. On a basis of absolute justice, the severity of the faculty was thoroughly justified; there were unwholesome tendencies in the old régime which needed correction and deserved rebuke. And yet it is doubtful if the faculty used its cooler wisdom in adopting measures that went beyond the programme to which the other faculties of the Conference had agreed. No permanent good was accomplished by the procedure; but it caused students and alumni to believe themselves unsympathetically, and even unfairly, treated by the faculty, and to resent far more than they otherwise would have done the change to faculty control. They felt, not entirely without cause, that a party

in the faculty, whose strength they could only surmise, stood ready for any opportunity to nick athletics in the heel. Hence they believed that athletics were being administered by those who had no sincere interest in their welfare. The athletic leaders supplied by the authorities were received with coldness and suspicion. The old glad confident Wisconsin spirit was depreciated by an alloy of sullenness and sneering criticism, on the part of too many students and alumni, which extended to other matters than athletics. This could not prevent the onward sweep of the university in numbers and power; but it introduced an element of discord at a time when this very growth demanded the application of every positive and vital force if the university was to preserve a spirit commensurate with its bulk.

It is a mistake to suppose that the extravagant enthusiasm lavished upon athletics by students and the alumni implies a proportionate over-estimate of their intrinsic importance. It is a mistake that arises from a puritanic failure to appreciate the significance of a ritual. That *esprit de corps* amongst the undergraduates and graduates of a school that we call "college spirit" requires a rallying point or occasion for demonstration. Athletic contests and rivalries are convenient and pleasurable occasions for its manifestation. It matters little whether that spirit be associated with some intra-collegiate activity like the old games at Rugby, or, as has become traditional here, with intercollegiate rivalries. What matters is a tradition that fuses together all the forces of an institution in enthusiastic social consent. Such a spirit not only magnifies the power of an institution as a whole; it intensifies the generous impulses and stimulates the creative energy of the component individuals and hence must be counted one of the precious factors

in the educational influence of the institution that possesses it.

Such a spirit Wisconsin possessed in an abounding measure in those fateful years for the state and the university which led up to the celebration of her Jubilee and the inauguration of President Van Hise. Not the least was it of the creative achievements of the immediate past, to have produced an individual capable of the strong leadership which was to guide the university onward through the era of significant expansion and innovation that was at hand. The choice of Van Hise, the first graduate of the institution and the first member of its faculty to be elevated to the presidency, was the culminating mark of the old order, as it was the initial event of the new.

XII

UNDER VAN HISE

AFTER considering for many months the question of a successor to President Adams, the regents of the university, on April 21, 1903, settled upon the Professor of Geology, Charles R. Van Hise, of the class of 1879. As has just been suggested, the election of Van Hise rounds out an era in the progress of the university and the state. Rarely shall we find, in so new a country, the case of a man who has risen to comparable eminence in science, in teaching, and in administration, whose relations have been so exclusively with his own university, as were those of Van Hise with Wisconsin. So far as he was the product of forces other than inherent qualities and those influences of no locality which go to the formation of any man who masters a subject of learning, he was a product of the society and the institution which the preceding pages have aimed to delineate. He never attended as a student any other university and he was never attached as a resident to any other faculty. He was a native of the state, and a son of pioneers.

Born in 1857, at Fulton, where the first sod in Rock County to be broken by the white man's plow had been turned exactly twenty-two years before, Van Hise spent among frontier surroundings—though in Wisconsin's most worldward tier of counties—the days of his boyhood. In the Evansville Academy, a few miles away,

he obtained the preliminary education which admitted him a freshman in the university the autumn of Bascom's first year at Wisconsin.[1] Thus he was one of the earliest group of Wisconsin students who experienced the force of Bascom's teaching. We have his testimony to the unique moral power and the durableness of that influence. At the beginning of the junior year, after a year's absence from the university, he passed from the General Science Course into the specialized course in Mining and Metallurgy and so came into the magnetic field of Irving, being the sole member of his class in that department. The apt pupil soon became the collaborator, and upon graduation, a colleague.

Beginning as assistant in Mineralogy, Van Hise rose rapidly through the several faculty grades, becoming at the end of four years, assistant professor, and at the end of six, professor of Metallurgy. In 1888, he was made professor of Mineralogy, and in 1890 of Archæan and Applied Geology. The establishment of a powerful department of Geology at Chicago in 1892, carried off President Chamberlin and Professor Salisbury, and Van Hise was attached to the University of Chicago as non-resident professor of Structural Geology. His connection with Wisconsin comprehended the periods of Bascom, Chamberlin, and Adams; so he came to the presidency having served in the faculty under each of these in turn. As a colleague of Irving, he had shared in the deepening intellectual tone of the university and had contributed to the notable development of science

[1] The date at which Van Hise entered the university is correctly given in Dr. Birge's memorial address (*Memorial Service in honor of Charles Richard Van Hise*, p. 7); incorrectly, in the biographical sketch which precedes it. Van Hise was absent from the university during the academic year, 1876-77.

teaching which marked the second half of the Bascom cycle. He had seen with joy the encouragement given to applied science by Chamberlin and welcomed his friendship to research. When, in 1892, the university announced itself prepared to confer the degree of Ph.D., in course, he had been the first to embrace the opportunity thus offered. While the creative energies of the university were expanding in the nineties, his own labors as an investigator were bearing large fruits, gaining him wide recognition in the world of science and among practical men of the mining industry. He was forty-six years of age when elected president of the university, and at the height of his career as a producing scientist.

The influence of President Van Hise upon the university was so powerful and so characteristic that he will never be long absent from the pages that are to follow; but it may be well to precede them with a suggestion of his general qualities as well as a brief record of his scientific work and the collateral activities of his later years, after which the notice of his influence as president will doubtless merge imperceptibly with an account of the institution under his guidance.

The first two words that rise to the mind, when one thinks of describing the personal qualities of President Van Hise are, *largeness* and *energy*. If there were a third, it would be, *definiteness*. It is not merely that these qualities were perceptible in him; they seemed to be the qualities which he most readily perceived and in which he took most delight. It was often jokingly said of him when he first became president, that Geology had influenced his scale of thought so that he could only think of the progress of the university in units of fifty years and of students in tens

of thousands. Certainly he was the first president of the university to make large forecasts and make them with confidence and precision. In nature he loved the vast elementary spaces and masses and the evidences of natural energy; and he believed implicitly in the high barometer as a coefficient of human destiny. In human effort he was more impressed by magnitude and efficiency than he was by delicacy or perfection, and this showed itself after he became president in his rating of men. He himself, at the beginning of his presidency, made no impression so strongly as that of huge force sincerely but grotesquely applied. To court humor or finesse was, for him, to invite a mishap. This was due, in part, to his defects as a public speaker, a capacity in which he became greatly refined through practice, as he did in all the personal arts. He had had little contact with society or literature. He knew the woods and the forge better than the platform or the smoking room. The contacts of the presidency made him far more a man of the world. But he never lost the freshness and reality of one who had threaded the forests of northern Wisconsin and Michigan before they were laid low by the lumberjack. He had been a prodigious strider of the wilderness; it is said to have been no holiday jaunt to follow him from sunrise to sunset when he was in the field. He was equally arduous at the lathe and microscope, a tireless worker, accustomed to undertake large tasks and see them through. That record of large work well done was a buckler of strength to the president of a university. He seldom referred to those giant quartos; but there they were—the answer to many a quibble!

In summarizing Van Hise's work as a scientist, I shall help myself generously to the statements of ex-

President Chamberlin, who has spoken with unique authority, both because of his technical knowledge of the field in which the work was done and because of intimate familiarity with the circumstances involved. Van Hise's earliest triumphs as a mineralogist were gained through successful application of "the new art of microscopic petrology" while he was a student in the laboratory of Irving. Of the significance of these studies, Chamberlin speaks as follows:

"The new art had begun to develop somewhat in the Old World while young Van Hise was yet a student, but he was one of the first in America to recognize its epoch-making power, and aid in its development; he was quite the first I think to bring its resources to bear upon the study of the crystalline rocks of the interior. The new departure was one of much moment in the history not only of petrology but of geology. Up to this time the means of determining the precise nature of the complex rocks formed of minutely intermixed crystals were both limited and untrustworthy. The revelations made by scrutiny under the microscope by the aid of polarized light and other appliances formed a new epoch in this basal science. To attempt to employ it at all in that early day, when its difficulties were so little known, made demands on the courage of the young men who ventured to try it and called for the fullest resources of their training in the basal sciences involved."

For ten years Van Hise worked jointly with Irving, at first upon the crystalline rocks of the Wisconsin Valley, but later and chiefly upon the iron-bearing formations of the Lake Superior region of Wisconsin and Michigan. With the untimely death of Irving, in 1888, the responsibility for their joint accumulations fell to Van Hise and these were embodied in a significant mon-

ograph on the Penokee series, completed in 1890 and published in 1892. Five years later a companion study of the Marquette district was produced by Van Hise working in collaboration with others. These volumes developed "the important doctrine that the present richness of the iron ores is due in part to the purification of the original ores and in part to the concentration of the iron compounds from above downwards, both processes being the work of the natural circulation of the meteoric waters." The working out of this theory of ore deposition not only established principles which had important bearings upon the practical location and evaluation of ore deposits, but involved corollaries which were noteworthy contributions to structural and historical geology. "In the treatment of the Basement Complex, the oldest recognized series of rocks, the very significant fact was brought out that the schistose members of the series were originally surface deposits, largely of volcanic origin, and that the granitic and granitoidal masses of the region had been intruded in these surface formations and hence were younger"; not, as had previously been supposed, cooled portions of the molten globe. Taken in conjunction with similar determinations in other regions, these discoveries, Dr. Chamberlin declares, "rob the doctrine of the molten earth of practically all field evidence" and are, therefore, "a contribution to the interpretation of an earlier part of earth history of the first order of importance."

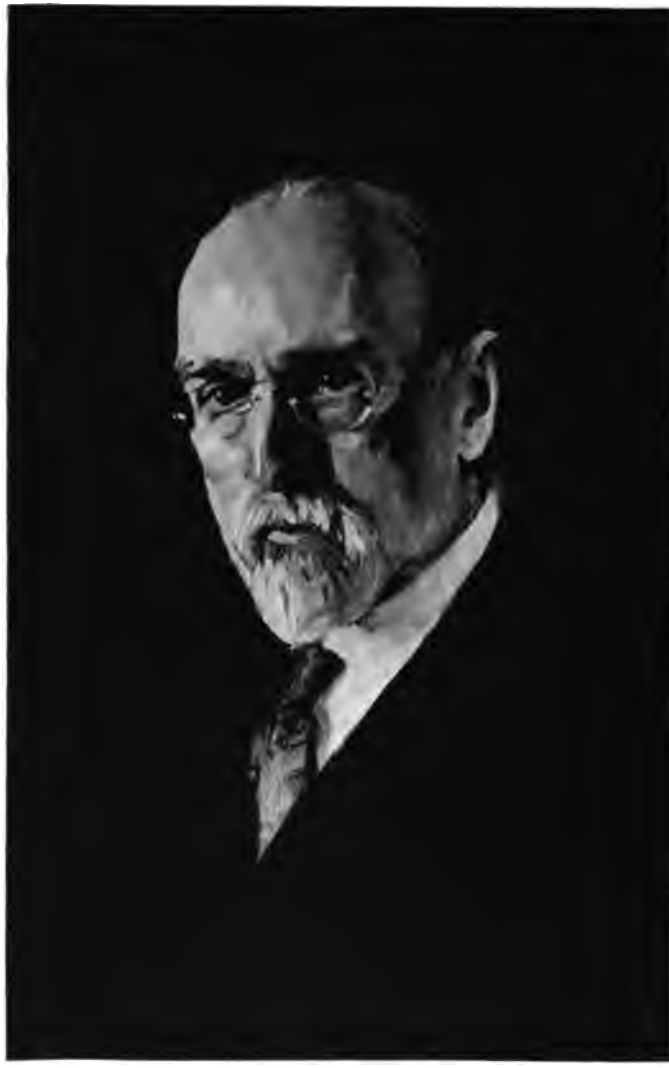
On the death of Irving the general direction of the work in the Lake Superior region had fallen to Van Hise's charge and the treatises just mentioned were followed by four similar monographs prepared by others under his supervision. All of this work, occupying six ponderous volumes comprising over 3000 quarto pages

and illustrated by multitudes of figures and maps, was brought to completion by 1904. It was "a monumental series quite unmatched in its own line," and "placed Van Hise at the head of workers on the iron-bearing series of the Algonkian or Proterozoic Ages." While this large work was going forward his more immediate personal studies were taking a broader and more philosophic range, leading to a series of correlation discussions of the oldest known formation and the next following systems, to special studies upon ore deposition, and above all to *A Treatise on Metamorphism*, a quarto of 1286 pages, which set forth, "in a masterly way and in great detail the leading modes by which the natures of rocks are changed and the agencies and conditions that take part in these changes." This huge book was passing through the press during the first year of his presidency and had every appearance of a valedictory. Nevertheless, he produced seven years later, in collaboration with C. K. Leith, a summary work on *The Geology of the Lake Superior Region*, which is said to be, on the geological side, "comparable to the treatise on metamorphism on the physico-chemical side."

During the fifteen years from his entrance on the presidency until his death, November 19, 1918, Van Hise's energies were mainly employed in the administration of the university. But his conception and execution of the task were such as to raise in his mind the problems of state university management in their broadest aspects and, more and more, his attention was attracted to the complicated questions of public policy which were pressing upon the state and the nation. With respect to the national life, his administration was coincident with the animated section of our history which extends from the middle of Roosevelt's first term

to the close of the world war. As regards state affairs, the earlier years of his administration coincided with the triumph of the so-called "progressive" movement in Wisconsin. It was, in both state and nation, a time of eager popular awakening to distinctions between the development and the exploitation of our natural resources. It was a time when varied programmes were putting forth to obtain for the people a more generous share in the material benefits of civilization through legal control of the financial and industrial organizations which had grown within a decade to tyrannical dimensions and power, and through readjustments in the political machinery by which such control was to be obtained and held. As always at such times it was far from easy to distinguish between the policies of sound statecraft and the reckless experiments of the popular demagogue. Van Hise was in no wise a politician. His utterances on public matters were always remarkably superior to imputations that their author sought political prominence or immediate political influence. But the fiscal affairs of the university were intimately involved with those of the state. The duties of the president brought him continually in contact with public officials and with practical problems of government. Once aroused, he attacked these subjects with characteristic vigor and thoroughness. By his writings and addresses and by his service on important commissions, as well as in his conduct of the university, he became a man of weight among public servants of the type to which Dr. Albert Shaw has given, with special reference to Van Hise, the title "economic statesman."

The economic bent declared itself, in a general way, in his emphasis from the start upon the relation of the university to the material interests of the state. Specific



CHARLES R. VAN HISE

From the painting by Christian Abrahamson

study of economic conditions is first indicated in connection with a matter which was quite simply a concern of university administration, that of faculty salaries. A discussion of that subject, occupies considerable space in his *Report* of 1908. It includes an examination of the trend of prices during the preceding decade and a forecast of the future, based on analysis of the existing financial and economic situation. Reference is made to sources of information which are not ordinarily consulted except by men of affairs or by students of economics. Doubtless it was rather as a specialist than as a publicist in the broad sense that he was included among those whom President Roosevelt called to Washington in May, 1908, for the conference at which the Conservation movement was launched. But Van Hise took up the cause in the broadest spirit of public service, was active in both the state and national Conservation commissions, gave numerous addresses, including a course of lectures to university students, and embodied his information and views in a valuable book on the subject.

In 1912 appeared his most ambitious economic study, a volume entitled, *Concentration and Control—a Solution of the Trust Problem in the United States.* As indicative of his broadening interest in the humanistic aspects of his special knowledge, it should be mentioned that he undertook, in his later years, a series of essays which discuss the part played by each of the minerals in the history of civilization. A volume treating of the economic lessons of the war was approaching completion at the time of his death. The respect for his opinions entertained by national leaders is approved by the frequency with which, during the last years of his life, he served on boards and commissions of national

scope and by the influence he exerted in these bodies.

Van Hise's theory of our material civilization was marked by his conclusion, on the one hand, that aggregations of capital and the organization of industry on a huge scale are essential to efficient and economical utilization of natural resources for the common welfare; on the other hand, it determined that these great sources of wealth and power must be controlled through the medium of the scientific expert and in a humanitarian spirit for the enrichment and uplifting of the whole body of people. There were those who were at first inclined to scoff at his pretension to hold influential views upon complicated questions of economic policy. And indeed his qualification for this rôle was not at first glance self-evident. He had not been trained as a professional economist; nor was he a practical mining engineer or operator, or even, in the more recent sense, an economic geologist. Yet, though in his special field, his tendency had been toward the establishment of large and comprehensive principles, these principles had been established through the orderly array of vast accumulations of exact and even minute observations. He had long maintained that the future advance of geological science was largely dependent upon its becoming in greater degree a *quantitative* science. His own findings had proved of advantage to mining experts and he himself was anything but indifferent to the practical applications of scientific knowledge. What he did, then, bring to the support of economic speculation was an abundance of exact, first-hand knowledge of our mineral wealth and our physical geography, together with a trained capacity for the accumulation and balancing of large masses of evidence. He brought, also, a strong sense for the economic basis of social action, great re-

spect for exact knowledge and for the expert in whatever department of life, and an inextinguishable desire to multiply the benefits of men.

Van Hise's conceptions as a geologist and a conservational economist pointed and concentrated in his work as an educational leader, which was the central work of his life. The scientist beheld a natural world inexpressibly vast, restless, and fertile; the economist perceived a democratic society half-organized and only vaguely conscious of the untold possibilities of coöperative action; the educator visioned these great complementary energies responding harmoniously to applications of trained human intelligence and will. To the teacher who had seen the capacities of the individual mind unfold with the opportunities of education, the most vital form of conservation to which the social economy could be directed was the conservation of individual capacity. "The greatest waste of this nation is its waste of talent," he said. "If we could only fully utilize our talent, there would be no limit to our progress; no one could forecast its speed." It was this apotheosis of progress that gave to his enthusiasm for the university its almost religious fervor. In the university he saw the agency, beyond all others, through which advancement was to be procured; advancement, material and spiritual; and not of the chosen few merely, but of the whole social state.

For he not only believed in the university; he trusted popular government. With thirty hostile or ill-advised bills in the legislature, he remained buoyant but active, convinced that good sense would prevail in the end,—as it usually did. Even when reverses actually came, he was undismayed, confident they were but swirls in the onward stream. It was no shallow optimism or

politician's flattery on his part, but settled conviction. The largeness and benevolence of his purpose justified him in boundless ambition for the university, and the solidity of his convictions sustained him in a leadership of unhesitating power and drive.

"I am not willing to admit that a state university under a democracy shall be of lower grade than a state university under a monarchy." This sentence from his *Inaugural Address* exemplifies the rugged baldness with which Van Hise sometimes exposed the backbone of a question. His frequent recurrence to the same form of statement indicates that he deemed it a pregnant condensation of the thought he worked in. And truly it is a statement which bares the main crux of our civilization. The quoted words contain at once a challenge and a declaration of faith. The challenge is to a democracy on trial, since, in its fitness to sustain the highest intellectual strivings of mankind, must democracy abide comparison with other forms of society. Men who have been persuaded to concede limitations upon the state university, as compared with private foundations or with the superior schools of monarchial countries, have not been candid, usually, as to the fundamental distrust of democratic institutions implied in the admission. Van Hise faced the implacable issue squarely. The obscure side-jump made by those who conceive of the university as semi-distinct from the state, as if it were by some miracle imposed from without and operating aloof, was refused by the logic of his mind. The university was incorporate with the state, one and indivisible. To assure continuance of growth it must, like the state itself, issue out of the whole being of the people and give allegiance and return by every backward line of radiation through which

it had been produced. Immediate hardships or inconveniences resulting from this relation were insignificant in comparison with the illimitable blessings that would attend the realization of its possibilities. All hope of permanent progress for our society was bound up with faith in democracy.

This faith, Van Hise never surrendered; but he came to hold and apply it more warily. He felt from the first, but felt more keenly as he gained experimental knowledge, that, in a society steadily moving toward more direct validations of the popular will, the university would have to exert stress—and this in no casual manner or degree—to justify itself to the mass of people. There was nothing specifically new in the conception as Van Hise held it at first. The emphasis upon the interrelation of university and state was a direct inheritance from Adams. But Van Hise infused the idea with a new potency and embodied it in a practical programme so large, so representative of his own trend of mind, and so effectual, that it became the basic principle of his leadership.

The first step—but only the first it should be noticed—was to convince the people of the state that the university was "a good business investment" by proving that it returned directly to the state, in economic benefits, more than was expended upon it, that it "showed a profit," as business men would say. It followed that all the less tangible benefits conferred by an institution of learning, those which were traditionally associated with higher education, really cost the state nothing, that these—again in the language of the street—"represented velvet." And this line of argument was peculiarly directed to justification of that branch of university effort for which, supposedly, it would be most difficult

to maintain popular support, and in which, as I believe, the president was most passionately interested,—of research. In any large scheme of things, it was shown, the state must support investigation, because all advance in the arts, whether of industry or social control, is preceded by discovery. No matter how remote from the practical interests of society the explorations of pure learning may appear to be, one never can tell when they may strike paying ore.

In promulgating this doctrine and in organizing itself to make good the promises based upon it, Wisconsin passed through no little internal commotion, while it became to the outside world somewhat a portent among universities. The new accent, at once materialistic and pious, appealed to the Rooseveltian temper of the hour. Whatever, just then, promised novelty and progress in social organization was assured of a ready publicity, and Wisconsin attracted attention on a scale quite out of proportion to the economic importance of the state or to the material progress of the university, striking as that progress was. By some, both within and without, it was acclaimed a new power of light and leading. To others, it appeared in the forefront of the powers of educational darkness. Both views invite some correction.

Certainly, whoever has seen in the Wisconsin of Van Hise only an extraordinary development of "university extension" and direct utilitarian "service to the state" has not taken account of its full development and has failed to comprehend the scope of its intention. It is not impugning the sincerity in which President Van Hise, and the university under his guidance, wrought for the common weal on the plane of the instant needs of men, to recognize that that activity was not a sole end

in itself, but was part of a far-seeing plan whereby the university built for security in its own proper sphere. For, in so far as it succeeds in enlightening the people on whom it relies for support to such a point that they will approve and sustain its ever mounting intellectual ambitions, the university precisely discharges its unique "service to the commonwealth," that of effective intellectual leadership. It is clear, then, that in the gross and scope of its intention the Van Hise outlook was beneficent and sound. There are, nevertheless, matters of particular and temporary emphasis concerning which there are doubts to be assuaged.

To indicate what emphasis is meant and to explain the doubts which arise from it, without the risk of conveying a false impression to those who have no exact idea of the activities of the university is a matter of some delicacy. It may in a measure forestall misconceptions if we have before us a brief but definite description of the activities of the university during the period under consideration. For this purpose, I know nothing better than a selection of facts recently compiled by Dr. Birge, and his commentary thereupon. The material progress of the university from 1903 to 1918, he illustrates as follows:

"The landed property of the University was doubled in area. Nearly $3,000,000 were added to permanent property in new buildings and their equipment. The income of the University was placed on a solid basis by the reinstatement of the mill tax. The total income was quadrupled in amount, and the appropriation for operation from the state increased nearly fivefold, from $427,000 in 1903 to $1,600,000 in 1918. Large additions were made to the teaching force. Old departments were enlarged and strengthened; new departments were added; the medical school and the extension division were es-

tablished. The faculty numbered 184 in 1902-3 and 751 in 1916-17. The students of the regular college year doubled in number during the same period; and nearly trebled, if short course and summer session are included. First degrees rose from 358 in 1903 to a maximum of 830 in 1917; and in the same period higher degrees rose from 29 to 179. During the fifty years preceding the Jubilee of 1904, the University granted almost exactly 5,000 (5,080) first degrees and 219 higher degrees on examination. In the following fifteen years, over 8,700 first degrees were granted and about 2,100 higher degrees. The signature of President Van Hise appears on two-thirds of all diplomas issued by the University since its foundation and on nine-tenths of diplomas for higher degrees awarded in course."

Here is, indeed, as Dr. Birge says, "a noteworthy record of rapid progress." The mass and power of the university in this period in comparison with its whole previous mass and power is overwhelmingly brought home, as well as the velocity of its movement. Is it strange that we should pause to inquire as to the quality of this mass; as to the manner in which this power has been applied; as to the direction of this extraordinary movement? Dr. Birge comments as follows:

"It has not been an advance concentrated in certain directions, least of all one dominated by considerations of utility or immediate vocational service to the community. That this great side of the work of a state university has not been neglected is sufficiently witnessed by the development of the College of Agriculture and of the Extension Department. That the needs of research and of the most advanced teaching have been equally protected is shown by the fact that the number of doctor's degrees granted during President Van Hise's term averaged 21 annually, as compared with an average of less than one-fourth that number in the preceding twelve years. The number of these degrees during the

last half of his term was twice as great as that of the first half. There was a steady and constant advance of the University in all its departments, interrupted only by recent changes due to the war. . . . It is a progress necessarily stated here in terms of statistics, though its story is not told by the statistics. For behind them lies a record of departments strengthened as well as enlarged, of teaching raised in character as well as increased in quantity; a record of the development into fact of the university spirit and of university method."

We may recognize in this, without offense, the official interpretation of the facts. It is carefully phrased; what is said is of course true and, as far as it goes, adequate. And yet the point remains that doubts have existed in regard to the general spirit of the university in this era which are not altogether quieted by the statement that its movement "has not been an advance concentrated in certain directions," nor by proof of the superior plane of intellectual difficulty upon which much of the work of the university has been done. There is something which is not touched even by the denial that the advance of the university has been "dominated by considerations of utility," a statement which is true, in that one would not care to make the opposite one in the same sweeping form. It is the elusive question of the prevailing temper of the university concerning which something must be said. Let us return to "service to the state."

The phrase, "service to the commonwealth," from the time it was displayed on the medal struck for the Jubilee of the university became the rallying-cry of President Van Hise's administration. Around the implications of this phrase wage all controversies as to the excellence of his régime. In the fullness of its conception, when presented at its best by President Van Hise, it

came as near providing a religious principle of action as any motto our modern democracy seems likely to find. The work and influence of Van Hise went far toward making it an effective principle in the life of the university. But, like all terms possessing a moral content, the term *service* is capable of a variety of connotations according to the spirit of its use. And especially is it capable of a higher and of a lower meaning. It is capable of a liberal and idealistic interpretation and it is capable of a mundane and degenerate interpretation. And too often the word has been conjured with in the lower sense. Wisconsin is far from having been the least restrained of western state institutions in immediacy of appeal and extremity of condescension to the velleities of the hour and of the unillumined. But at times the idea of service has been applied to the glorification of materialistic pursuits with such an emphasis as to imply that there is something amateurish and self-indulgent about the distinterested pursuit of knowledge or of culture. On the part of President Van Hise this emphasis was due in a measure to a desire to fortify the position that the university is an economic asset of the state. But it was natural in one whose professional progress had been a part of the triumphant march which gained, first for science, and then for applied science, a place in the sun. It was a natural outcome, too, of his innate sympathy with definite results and with benefits that could be measured and weighed. But one's passion for service to his fellow man may run toward presenting him with some just impression of a value in art or morals or an elusive concept of gravitation, rather than toward providing him with cheaper electricity or subtilizing his philosophy of municipal sewage. It is hard to see that the spirit

of service appears in one process less than in the other. Nor is it easy to deprive oneself of the prejudice that the former set of functions is higher than the latter. In each case, there is the gift of a possession of knowledge; but one set of possessions is higher and the other is lower. The lower may be necessary and useful, and they are; we may even have to admit that they are all we can attend to for the moment. But we do wrong grievously, if, to improve the countenance of an utilitarian emphasis, we equivocate these values by an unfair diffusion of the idea of service.

The argument that the university is "a good business investment" is not in itself unsound; nor was there anything improper in presenting it for what it was worth; there was some loss to the university, however, in the extraordinary emphasis with which it was given prominence at the expense of other claims to consideration which it is more vital for a university to have presented and to have emphasized. There was no pronouncement of the period that President Van Hise was more fond of repeating in later years than that of James Bryce, delivered at the inauguration of President Lowell of Harvard, that "a university should reflect the spirit of the times without yielding to it." It will be seen that the issue here must inevitably be one of degree, of emphasis; and the question very naturally arises, whether Wisconsin was not quite distinctly yielding to the spirit of our times in challenging the attention of the people so forcibly upon the plane of their material interests and "selfish solicitudes." It may well be inquired how far so flattering a reflection of the spirit of the times is harmonious with the high spirit of intellectual leadership which we have a right to expect in a university. It may be questioned whether an institution

of highest learning is not going the wrong way about, when it encourages its constituency to think of its gains in disinterested science and liberal culture as "representing velvet," lending comfort thereby to the vulgar disposition—always sufficiently pronounced—to regard all the finer things of the mind with amiable tolerance, so long as they cost nothing. Too much is being made of this point, but there is a related one of which too much can hardly be made.

From the notion that these gains can be had without economic cost, it is a short step to the notion that they can be had without educational cost. The step, as a matter of fact, has been taken by those—and Van Hise was one—who have championed applied subjects and vocational courses as factors in a liberal education. This is to maintain that the fruits of a liberal education can be had without specific appropriations of years of life, and without specially directed intellectual effort; that culture may be acquired incidentally. But those who really understand culture and who really care about it know that it cannot be obtained so cheaply. They know that it cannot be obtained without an effort quite as definite and quite as devoted as that required for a mastery of the useful arts. And so the final problem confronts us: How far is it the duty of a university to stand by that knowledge, even at considerable sacrifice of popularity and practical usefulness, in order that it may fulfill in a higher sense, its unique function as "an instrument of the state"? Once more, the issue is one of degree. When we are told that the university has not been "dominated by considerations of utility" we can neither truthfully nor politely reply by the opposite assertion; but we can inquire how far it has been *influenced* by such considerations. And if we are

told, and truthfully told, that a university has resisted the materialistic demands of the hour, we can ask whether it has resisted them *sufficiently*. We can ask where its weight has been thrown.

The foregoing reservations are not intended to disparage the splendid service which the university has actually rendered to the state in recent years. Nor do they mean that Wisconsin has been less faithful to the appropriate ideals of a university than other institutions of its class in this country. The reputation for "utilitarianism" which became attached to Wisconsin some years ago is to be attributed, in part, to a slight precedence in point of development over similar institutions, and partly to certain features of novelty and accidents of publicity that had little to do with the main mass of the central work of the university. In order to appreciate how little deserved this reputation was, one needs only to know how extremely distasteful it was to a considerable body of the faculty, as was, also, the excited emphasis of the administration upon the practical achievements of the institution and upon the notice it was attracting abroad. These objections, therefore, serve to represent in a measure that body of conservative sentiment and more sensitive taste. They give an indication, moreover, of the determined opposition against which some features of the new programme had to be carried,—carried only, at times, by bringing into play the full pressure of administrative prestige supported by dark allusions to Demos in the background. They do not prove, granting them every validity except that of final weight, that Van Hise had not the bigger grasp of the main situation. We cannot tell without a larger perspective than is yet possible—if we can ever tell—whether the university would have done better

to apply its strength in a slightly different direction, or whether Van Hise was essentially right in believing that it must build for the immediate welfare of the state at large and for its own strength and security as a popular institution, and—however regrettable the fact—that the finer flowering of our democratic civilization must await the coming of the golden year.

The president was not one, himself, for delicate regrets. He could not have done what he did if he had not thoroughly believed in what he was doing, and he could not have believed in it so thoroughly without a certain actualism of temper. It would be most unfair to imply that the less tangible responsibilities of a university which have been glanced at were omitted from his scheme of development for the institution and the state or that efforts to meet these were without recognition or encouragement when they chanced to put in an appearance. They were not; but it usually happened that other parts of the scheme were more urgent to be realized. For instance, a department of Fine Arts had a weakly birth and an early death on the rocks. Allowance must be made of course for the fact that an administrator may be no opportunist and yet be constrained to a certain degree of opportunism. He does what he *would* do as far as he can and what he *can* do as far as he will. The unfulfilled dream of halls of residence for men and the substantial realization of university extension are cases in point. In the main, however, President Van Hise carried out what his heart was set upon; development was powerful in ranges where his perceptions were most acute. His work was rugged and constructive, befitting a pioneer.

As the university expanded, it not only became larger; it became of necessity more vigorously organized. And,

as must happen in powerful organizations and in times of sweeping change, men of sensitive talent and fastidious temper were subordinated, seeming inert or reactionary. It is not meant that such talent was unfairly treated by the administration, but that the whole environment and competition were inimical to its prosperity and distorted its application. More and more, experts and organizers predominated in the faculty. Van Hise liked men about him who got things done. And, anyway, the university was in a stage of advancement when men were bound to assume importance for their business character as well as for their qualities as scholars and gentlemen. The intellectual activities of the university became broader; those of individuals narrower and more expert. This was true, alike, of faculty and students. The ambition and the opportunities to advance knowledge were immensely increased. The ideal of efficiency was promoted; men acquired the disposition to do things right and to do them well. Contacts with public affairs increased, and the sense of public duty was stimulated. The idea of service became a vital principle,—sometimes rawly expressed, but wholesomely applied. This was fortunate, for it introduced some cohesion in an institution which, socially, was becoming enormously heterogeneous and in danger of substituting organization for a heart and soul. The general temper was that of a rough-and-ready, good-natured, rather materialistic, somewhat ostentatious, humanitarianism. It was nevertheless a genuinely kindly spirit of serviceableness which permeated most of the departments of the university and declared itself in helpfulness toward the public and in generous coöperation between departments. This last characteristic has been of superlative importance to the

university. Only a sincere spirit of helpfulness could have vitalized the idea of "service to the state" from a cold-blooded "business proposition" to a principle of some warmth and imagination. And only through cordial relations between departments could the university have harvested the scientific advantages which Mr. Abraham Flexner doubtless had in mind when he referred to Wisconsin as "fortunate beyond almost all other states in the concentration of its higher institutions of learning."[1] With respect to the student community, it should be stated that, in spite of considerable increase of wealth in some quarters, there prevailed a wholesome democratic feeling between students of all classes and it should be further added that there was the best of good will between the men and the women of the institution.

There was enough in all this to warrant pride in Wisconsin on the part of her sons and daughters and attach them to her in loyalty and love. If we fail to find in the Wisconsin of Van Hise any pervasive presence of the spiritual refinement and the grace of life which we crave for our ideal of the "greatest" university, we can at least account for the fact by the explanation that these things did not, perhaps could not, belong to that cycle of development. It was only her more crass journalistic admirers who grieved the judicious by referring to Wisconsin as "the greatest university in the world." The president relished foreign eulogies and gave them currency not because he cared for applause, even for the university, or thought it had reached perfection, but because, in words used by Bascom a generation earlier, "honor abroad enhances the estimate in which a university is held at home." Speak-

[1] Report of the Carnegie Foundation, 1910.

ing for the university at large, it had learned that it was important, but had not yet forgotten the fact.

It should be said in review that perhaps the centralizing of the foregoing discussion about the president tends too much to leave an impression that the development and temper of the university in this period reflect the influence of one man. It was not quite so; although the initiative and dominance of the president were pronounced. Rather it was as the accepted leader of a party in the faculty and in the board of regents which —not in a political but in a moral sense—derived strength from the dominant disposition of the state, that President Van Hise shaped the course of the university. The course chosen gave sheer advantage of wind and water; the progress and prosperity were great.

An outline of the total development of the institution in numbers, material resources, and intellectual pitch is already before us in the synopsis by Dr. Birge which has been quoted.[1] Supplementing this information, the chart reproduced on an adjacent page portrays in graphic lines the growth of attendance and the increase in the financial resources of the university from the beginning of Bascom's administration until the present time. During the period represented, the university has experienced no long or serious check to its progress in these respects, though it has not advanced at a uniform rate, as a glance at the chart will show. The tracings run comparatively level through the Bascom period, then comes a gradual rise to 1903, after which the ascent becomes increasingly precipitous almost to the apex in 1916-17. Here the enrollment line suddenly

[1] Above, p. 345. An analysis of attendance for the entire period and detailed information in regard to the buildings of the university will be found, in tabulated form, in the Appendix.

jags downward, for reasons that are obvious. If the sudden recovery after the war were shown this line would rise almost perpendicularly to a point far above any preceding height, and yet to about the point that would have been reached by the normal attendance curve had there been no extra-normal interruption. The sharpest uniform rise through a series of years is that from 1908 to 1914, and this definition of a middle section of the Van Hise period parts it into three nearly equal divisions which correspond to significant aspects of the development of the institution. Many factors enter into the growth here indicated; but they may be simplified to three: increase of patronage within the state and from abroad as a result of the widening reputation of the university; enlargement of the material facilities and instructional force, made possible by the response of the state to the needs thus indicated; expansion and advance of the university into added fields, with a consequent further increase of patronage in response to the new opportunities provided. There was, of course, a constant reciprocity of action amongst these several factors.

"If we wish numbers we may well do something by wise advertisement to secure a larger attendance from neighboring states. There is no institution of equal power so little known beyond the borders of its own state as the University of Wisconsin." Thus Bascom wrote in 1884. There had been a gradual change in this respect in twenty years; but partly through uninvited circumstances and partly through direct policy, a decided impulse was given to advertisement of the institution at the beginning of the Van Hise period. A Press Bulletin was at once established for the purpose of supplying the newspapers of the state and beyond

it with correct information concerning the university, in advantageous form. One of the motives for organizing the Jubilee was, so the president reported, "to strengthen the University in the State and in the Nation." It was recognized that, in order to serve the state in a truly eminent manner, the university would have to maintain a strength which would involve serving others as well. It could not accomplish its object while remaining a merely provincial institution. The impression produced by the Jubilee was reinforced by other circumstances. The exhibits of the university, especially those prepared by the agricultural department, had scored high at the St. Louis Exposition in 1903. A group of British publicists, known as the Mosely Educational Commission, toured the United States in the autumn of 1903 and issued a report the following spring. These men were particularly struck by the relations of government and education in America. Among the state universities, Wisconsin received substantial notice and was given a high rating. The points selected for peculiar commendation were the enterprise of the agricultural department, the strength of the university in History and Political Science, the excellence of the buildings, and the unexpected adequacy of the library. The following autumn Mr. George Peabody of New York subsidized a visit to Wisconsin on the part of some forty representatives of the state of Georgia, including the governor of the state and the chancellor of the university. The event was regarded as broadly significant and was noticed by journals of national circulation. During the next three or four years, culminating in 1908, Wisconsin was the subject of numerous unsolicited popular articles, most of them stressing the practical work of the university in agricultural re-

search and in extension and the close coöperation between the university and the state government.

The state was in the midst of a programme of advanced legislation which was awakening national curiosity and among the striking features of its procedure was the use being made of the resources of the university. Beginning in 1907 with a direct appropriation of $20,000, university extension was rapidly developed in a manner and on a scale never before tried. The novelty and magnitude of the experiment and its consistency with the other undertakings for which Wisconsin was becoming famous drew increased attention to the university and the state. Theodore Roosevelt in the *Outlook,* Dr. Shaw in the *Review of Reviews,* and other critics of American institutions who had the ear of the nation, joined the chorus of eulogists. Of course there were dissenting voices; but on the whole the tone of the remarks was exceedingly respectful. Two books on Wisconsin appeared in the spring of 1912, Dr. Charles McCarthy's *The Wisconsin Idea* (Macmillan), with an introduction by Roosevelt, and a book by Dr. Frederick C. Howe, entitled, *Wisconsin, An Experiment in Democracy* (Scribners). Both volumes dealt primarily with the political reorganization of the state; but each gave importance to the function of the university in distributing useful knowledge to the people and in providing the state government with the expert services required by its new activities. Both volumes were copiously reviewed, *The Wisconsin Idea* supplying the basis for a widely circulated English article of the same title, published in the *Contemporary Review.* Both books were uncritical. Dr. Howe's book glorified the party in power and its leader in a manner which gave it the tone of a partisan document. That of Dr. McCarthy, though

confessedly done in haste, was the more solid of the two; but its basic parts were vitiated by exaggeration of the German provenience of the Wisconsin idea and by undue scorn for the culture of the American seaboard and for all aristocratic contaminations. It is doubtful if the hanging of these companion portraits in the state dining-room really improved the house. "Explaining Wisconsin" as it was denominated by a writer in the *Nation* gave indications of becoming a leading industry and "the little old U. S. A.," though still polite, exhibited unmistakable signs of *ennui*.

We must return for a moment to the Jubilee. The Jubilee was organized by the faculty under the direction of Professor Comstock and was worth all the effort expended upon it, simply as an incident in the communal life of Wisconsin. It was probably the most exalting ceremonial occasion in the history of the university,—perhaps of the state. The anniversary chosen for celebration was that of the first regular Commencement. Special piquancy was added to the services of congratulation and re-dedication by the fact that their central feature was the first installation of a graduate of the institution as its president. The expenses of the enterprise were defrayed from money subscribed by alumni and friends of the university in sums ranging from one dollar to a thousand dollars. Enough was left over to provide for the publication of a handsome commemorative volume. For the sake of scenic harmony, but not without some precedent clashing of temperaments, the faculty adopted, for the occasion, academic costume. Other universities and learned bodies were most cordial in their assistance. Delegates were accredited from seventy-nine universities and fourteen learned societies of this country, and of foreign coun-

tries. A very large proportion of these were actually in attendance and many institutions sent several representatives; there were eight from the University of Chicago and four from the University of Michigan. There were, besides, representatives of various schools, a large number of special guests, and the officers of the university and the state. Many of the delegates, because of some association with Wisconsin, had sentiments of affection or relevance toward the institution and the ceremonies were starred with urbane allusions. The festival occupied five days of a week in June. The mornings were consumed in oratory, academic processions and public ceremonies; the afternoons were devoted to concerts, excursions, and inspections; the evenings to receptions, banquets, and spectacles,—a torchlight procession and student harlequinade, a water fête and illumination on the lake, and so on. The spectacle which the mind revives with most delight is of the black-robed procession under leafy elms or against the library marble —then in the pride of newness—all variegated by the vivid Wisconsin colors with which were mingled the bright hoods of Oxford, Cambridge, and London, of Yale and Harvard, of Kansas and California.

The only serious disappointment was the absence of Dr. Bascom whose illness at the last moment prevented him from making the journey from Williamstown. His Baccalaureate Address was, at his request, read by Mr. Olin. The only dull occasion was the formal dinner on Wednesday evening. The speakers were distinguished enough; perhaps the guests were sated with four days of eloquence. The Inauguration ceremonies occurred on Tuesday morning, June 7. It was Wisconsin's day and its chief piece was the memorable *Inaugural Address* of the president. This was preceded

by addresses on behalf of the various university interests, for the state by Governor LaFollette, the president's class-mate and friend; for the regents by Colonel Vilas; for the alumni by Congressman Esch; for the faculty by Professor Turner; for the students by Mr. Eben Minahan; for the sister universities by President Harper. On Wednesday morning came the Jubilee ceremonies consisting of the presentation of delegates, followed by addresses by five university presidents: Gilman of Johns Hopkins, Jesse of Missouri, Wheeler of California, Northrop of Minnesota, and Angell of Michigan. The large sanity of the first and the touching eloquence of the last made the day one to be remembered. Thursday morning was mainly consumed in conferring degrees; but there were two notable addresses: one by ex-President Chamberlin on *The State University and Research*, and an address on *The Unity of Learning* by a representative of Oxford, Principal William Peterson of McGill University.

The last address was one of the brilliant triumphs of the celebration, second only to the powerful manifesto of the president in significance, and supplementing it in complementary colors. Coming at the very end of an arduous programme, it opened a totally new box of tints and completely revived an audience beginning to droop under five days of earnest speech-making. It deployed so harmlessly and so genial was its tone, that one was a bit startled upon realizing that some archness was intended when the speaker explained in his opening that on former peregrinations he had never been so far West, or rather, he preferred to say, quite so near what he had been told was to be considered "the center of American gravity." A sly allusion to the heaviness of last night's dinner was thinkable; and in general, the pre-

ceding speakers could not be justly accused of having erred on the side of frivolity. Yet, for all its cunning, there was in the address of the Oxford representative such accomplished simplicity, such rightness of feeling, so much modesty in explaining the ideals of Oxford and eloquence in her defense against the gross aspersions of a recent writer in one of our vulgarest and most widely read magazines, there was, in fine, so choice a mixture of the qualities, which Johnson praised in Addison, of "familiarity without coarseness and elegance without ostentation," that the speaker was plainly a more appealing persuasion than any he presumed to utter toward a discipline that makes, first of all, for the making of men. Thus a son of Oxford added the consummating touch of brightness and charm to an inspiring episode in the life of the University of Wisconsin.

The great plans for the development of the university upon a new scale which were unfolded at the Jubilee were founded upon definite knowledge of still broader plans for the development of the state. The LaFollette wing of the Republican party had come into power in 1900 and, at the opening of the Van Hise administration, was just settling to the collar. The progressive programme contemplated a larger use of public money for the public good, and the university as a recognized instrument of the public service was to share in this liberality. The object of the progressives was to develop the state government into a power suitable to cope with the great business organizations so that it might protect unorganized interests against oppression, preserve the natural resources of the commonwealth from private plunder or appropriation, and so distribute the burden of taxation that organized capital would be compelled to stand its full share in supporting the agencies created

to control it. In order to make it more difficult for special interests to influence the personnel of government, the direct primary system of party nominations was adopted in 1903. This was improved in 1911 and supplemented with a corrupt practices act. In 1903, also, the *ad valorem* taxation of railroads was put into effect, involving the creation of a Railway Rate Commission with powers that would prevent the railway companies from passing the tax on to the public. Its jurisdiction was soon extended to all so-called "public utilities." A comprehensive civil service law was adopted, removing from political influence an army of stenographers, clerks, assistants, and minor officers of the state. A Tax Commission was created for the more scientific and disinterested solution of the tax problem, resulting in the adoption of the income tax system in 1911. The passage in this year of an Employers' Liability Act carried with it the creation of an Industrial Commission for the adjudication of claims. The practices of banks, of insurance companies, and of many other agencies capable of abusing the confidence of patrons were regulated by more specific laws and brought under rigid supervision of permanent state commissions. A supervisory Board of Public Affairs was established in 1911. The political campaign of 1910 centered in a determined attempt to overthrow the prevailing régime and issued in an overwhelming endorsement of its policies by the voters of the state. As a consequence the progressive programme was extended and confirmed by the legislature of 1911 in measures of which examples have been given. In formulating this mass of new legislation which, particularly in the single session of 1911, was of amazing extent, the Wisconsin legislators had the assistance of the Legislative Reference Library, with its

corps of trained clerks and bill drafting department, that had been established in the State Capitol early in the progressive period under the direction of Dr. McCarthy.

It will be seen that such a system of governmental control as is here briefly sketched contemplates the employment in the public service of a large body of specially trained men. Nothing could be more natural than that a goodly number of such specialists should be recruited from the faculty of the university. This is exactly what happened. Not only were several members of the faculty called to take places directly upon commissions, but a much larger number were employed to give technical service in subordinate capacities. It was natural, too, that during the formulation of so much untried legislation and administration, university specialists should be asked by members of the legislature and by the state officers to give assistance and advice in their fields of special knowledge. By 1910, there were thirty-five professors of the university who were giving part time to some branch of the state service. Many of these, along with advanced students of their departments, were employed in the work of valuation that was going on. Men to whom the new system of state control was unwelcome, harboring the old grudge of the practical man against the theorist and piqued in their fortunes, challenged the validity of the findings, and even the good faith, of these servants of the state. The cry arose that the university was in politics and murmurs were rife that it was becoming too expensive. Admirers of the university added fuel to the fire by magnifying the participation of the university in state affairs, and the officers of the institution were well put to it to preserve a discrimination in the popular mind

between "service to the state" and political activity. It was a legitimate distinction, but it was one which those interested in doing so could easily obscure. As a matter of fact, the vast majority of the faculty had little leisure for politics, being sufficiently occupied—as they should have been—with their subjects and their teaching. Another ambiguity arose in relation to the cost of the institution. Its expansion into collateral fields of activity and its large acquisitions of permanent property in lands and buildings made it easy for the careless or mischievous to completely misrepresent the cost to the state of operating the university proper. Not infrequently the gross expenditure for a given year would be exhibited as the annual cost of operation, ignoring the offset of half a million dollars in student fees, the expenditures on capital account, the large expenditure for extension, both agricultural and general, and the great sums which merely passed through the treasury on revolving funds. One furious critic kindled to a white heat of indignation over the iniquity of drawing fifty thousand dollars from the state treasury to send a few students about the country playing football, although anyone who presumed to an opinion on the subject should have known that these moneys were the receipts of games, merely handled for convenience through the regular financial agencies of the university.

Matters came to a crisis in 1914. In that year the progressive party was overthrown and a new administration came into power committed to a policy of retrenchment and more conservative legislation. The university was an issue throughout the campaign and during the ensuing legislative session the officers of the institution had much cause for anxiety. To make mat-

ters worse the university, during the autumn and winter months preceding the meeting of the legislature, had to pass through the ordeal of the now notorious Allen "survey." The survey did not originate in hostility to the university. It was undertaken under the auspices of the Board of Public Affairs appointed by Governor McGovern, who was an alumnus of the institution and its cordial friend. It soon became evident, however, that the survey was to be conducted in an unfriendly spirit and the faculty and officers of the institution—while employing every means in their power to assist the manager of the survey in getting the information he desired—prepared themselves to confront the expected injustice with their own version and interpretation of the facts. When printed the Allen report comprised 527 quarto pages of fine print, to which were added about 250 pages of university comment. The report revealed an animus in some parts and a futility in others which discredited the entire survey and in the end it had virtually no effect upon the situation. As for the new government of the state, it showed itself not unwilling to listen to the explanation of the university authorities as to the plans and requirements of the institution, and if any thoughts of seriously crippling the university or reducing it to subservience to the business interests of the state had been entertained by those in positions of effective influence, the plan was speedily abandoned. The university administration was compelled to accept a considerable reduction of its estimates for the immediate future and to abandon, in part, its plans for constructional development; the progress of the institution was slackened but not stopped. It was shown conclusively that the university had gained an invincible hold upon the sentiment of

the state as a whole which would defy any attempts to identify it with one political faction or another.

In the *Survey* of December, 1915, Professor George H. Mead, of the University of Chicago, after reviewing in great detail the Allen report and the difficulties confronting the university in the political agitation of 1914-15, presented the following admirable interpretation of the sequel:

"It is in the study of such incidents that we realize the growth that is going on underneath the surface of society. The university has become a part of the people of the state. It is true that favoring political conditions during the last decade have attended its remarkable recent growth. But these conditions have merely given it the opportunity of developing. And the unfavorable political conditions of the last year could not materially affect this life and growth. No man and no party could be a power in Wisconsin who was regarded as an enemy of the university. The result of the year has justified President Van Hise's programme of carrying the university to the people. For while this has rendered the university popular it has not detracted from the scientific and cultural activities within the university.

"It is easy to overestimate the import of the proposed measures which would invade the control of university life by the legislature. The fact is that the university had only to present carefully its own case to the legislature to find that the university and its administration has the confidence of the community. A university is not an artificial thing even in its detached scientific and æsthetic expressions. It is within the province and power of individuals to present the occasions under which such institutions arise. They have never created them.

"Just as private foundations inevitably undertake public tasks because they are there to be done, so our politics cannot in the end avoid serving public institutions that have become a part of society."

As has been said, the university shared in the liberality toward all public agencies which was inaugurated by the progressive administration. Despite many gloomy predictions that regulative legislation would "drive away business," the production and wealth of the state, both in agriculture and manufacture, increased enormously during these years. In the decade 1900-10, the assessed valuation of the state advanced from three-quarters of a billion to two and three-quarters billions of dollars. The mill tax principle of providing support for the university, which had been abandoned in 1899 in favor of fixed appropriations, was resumed in 1905 and a two-sevenths mill tax was imposed for current expenses. The legislature of 1907 added an appropriation of $200,000 a year for two years for permanent improvements and two years later the avails of the mill tax were enlarged by an appropriation of $100,000 a year for operation in addition to a special appropriation to provide for the establishment of university extension. The astonishing legislature of 1911 raised the rate of the university tax from two-sevenths to three-eighths of a mill, raised the appropriation for permanent equipment to $300,000 a year, and increased the appropriation for general extension to $225,000 and for agricultural extension to $80,000 for the biennium. In addition, a special appropriation of $75,000 a year for two years was made for a woman's dormitory, provision was made for the construction of the north wing of the historical library building, and there was an appropriation of $47,000 a year for five years for the purchase of land. Much of the work done by the legislature of 1913 was undone by its successor, in consequence of the reaction which has been described. It was during the period of five years bearing upon 1911 as a center that the material

expansion of the university was greatest. Since that time the institution has been so supported by the state that its increase of students has been measurably taken care of and its work in instruction and research has not yet been seriously crippled; but constructional work has been very nearly at a standstill since 1915, so that at the present writing, with a much larger attendance than ever before, there is urgent need for a substantial increase of space and material facilities.

Since the war the university has been able to meet its obligations only because the withdrawal of students and members of the faculty to enter the service of the nation enabled it to reduce expenditures during the war and thus accumulate a surplus which was augmented by remuneration from the federal government for the housing, feeding, and instruction of 4,500 soldiers in uniform. The situation in which the university finds itself, together with a summary of its financial history during the six years preceding the war, is clearly presented in the following extract from a recent article by the business manager of the university:

"From 1911-12 to 1913-14 the total annual receipts from the state for both the property tax and the general fund for all purposes increased from one and a half million to nearly two million, or about 22%. During this period receipts from the state for the purchase of land, new buildings and for the special university activities mentioned above increased from less than half a million to three-quarters of a million, or about 60%. In other words, the support from the state for strictly instructional work at Madison increased from almost $1,100,000 to about $1,150,000, or about 5½%, while the enrollment of regular students increased from 4,149 to 4,686, or some 13%. During the same period the

average annual contribution of state funds for land and new buildings amounted to over $400,000.

"From 1913-14 to 1916-17 inclusive the annual support of the state for strictly instructional work at Madison increased from about $1,150,000 to about $1,280,000, or some 11%, while the enrollment of regular students increased from 4,686 to 5,318, or some 13½%. At the same time the average annual contribution of the state for land and new buildings was reduced to about $255,000, while the contributions of state funds for the activities of extension work and the other lines indicated above increased from about $260,000 to over $330,000, or about 28%.

"In other words, during these two periods of six years the enrollment of regular students increased from 4,149 to 5,318, or about 28%, while the state support for the instruction of these students increased about 17½%. During the latter part of this period a very material reduction occurred in the appropriations for land and buildings, while at the same time the university faced a steadily increasing cost of labor, supplies, material and instructional salaries. It is perfectly evident that the state support of the university must be placed on a higher basis if the institution is to continue service in the future as in the past, and large sums will also have to be provided for expansion if the university is adequately to perform its function of service to the state."

It appears from these figures that, notwithstanding alleged extravagance in the years immediately preceding the reaction of 1914, the university was already falling behind the increase of student numbers in its expenditures for instruction, whereas, from that time until the opening of the war it lost less ground in the provision of instruction but failed to keep the pace in constructional development. The years just before 1914 were the years when the university was most active in the

THE STOCK PAVILION

construction of buildings and in acquisitions of land. During the five years from 1908 to 1913, the expenditure for buildings almost exactly equaled the expenditure for the same purpose during the ten years preceding.

At the same time it was reaching out for land. Various adjacent city properties were added to the campus. Hundreds of acres of land were acquired for experimental purposes in various parts of the state. With money appropriated for the purpose in 1911, the university secured command of the lake shore for three miles to the west. This was to prevent the city from overlapping the campus and, incidentally, provided more land for use by the College of Agriculture. By 1914, the landed holdings of the university amounted to over fourteen hundred acres of which about six hundred and thirty-eight acres lay in a continuous, though irregular, area from Park Street to Eagle Heights. Thus the university is able to preserve for public enjoyment this beautiful lake shore tract which is sure to increase in value and whatever may be the growth of the city or of the university, will provide a campus sufficient for all time.

During the first five years of this period, construction proceeded at almost exactly the same rate as during the preceding five years. Plans for a Chemistry Building, to be placed at the southwest corner of University Hill were being prepared for President Van Hise while he was in Europe, the summer following his election. The building was occupied two years later. About the same time a Hydraulics Laboratory was erected on the lake shore, and two years later the buildings for Agronomy and Agricultural Engineering were completed. All of these, with the Engineering Building and Agricultural Hall, mentioned in a preceding chapter, estab-

lished a style of brick construction of utilitarian appearance which many consider unfortunate. The north wing of University Hall was added in 1905-6 and the same year a limestone dwelling at the corner of Park and State Streets was remodeled and enlarged to form the present Administration Building. All of these buildings, except the last, were designed to enlarge the space available for class and laboratory instruction.

As soon as the large continuing appropriation for permanent improvements made in 1907 became available the main building programme of the Van Hise period began. Fortunately, at this time, the university received from Messrs. Laird and Cret, architects, plans for the constructional development of the university which had been prepared in consultation with the landscape architect, Mr. John Nolan. More fortunately still, the details of material and exterior design were placed in charge of the present state architect. Mr. Peabody saw at once that the simple designs in native sandstone which had been indicated by the oldest buildings of the university, should be perpetuated except for such modifications on the westward slope as were necessary to form a transition to the recalcitrant brick of the agricultural section. How successful this transition will be is not yet assured. The first buildings of the new era were widely separated in location and object and neither was for instructional use in the ordinary sense. These were Lathrop Hall and the Stock Pavilion, the one on that corner of the upper campus which was dedicated in 1870 to the women of the university and the other adjacent to the farm buildings at the extreme west of the agricultural section. The former is a large and handsome building thoroughly equipped to serve as a center for the social life of the women, containing among

other conveniences a spacious drawing-room, a gymnasium and swimming pool, and a cafeteria-restaurant serving three thousand meals a day which have the distinction of being the best for the money in the city of Madison. The Stock Pavilion, oddly enough, is an extremely fine building. Its cattle-judging arena is at present the only indoor area in the city capable of accommodating the Commencement audience. Its chief disadvantage for intellectual occasions is an aroma of association which might suggest to the pedant some indelicate allusions in Jonson's *Bartholomew Fair* to the former uses of the theater in which it was played. To the same period belong the great Central Heating Plant on University Avenue and the Forest Products Laboratory at Camp Randall.

Buildings of some consequence erected between 1911 and 1914 were Barnard Hall which was added to the woman's group in 1912, the Biology Building erected the same year on the slope between University Hall and South Hall, the buildings for Horticulture, Agricultural Chemistry, Extension and Home Economics, the University High School, a Service Building, and important additions to the Engineering Building, the Historical Library Building, the Chemistry Building, the Dairy Building, and the Gymnasium. The Olin home, adjoining the President's House on the shore of the lake was enlarged and accommodated to the use of the department of Student Health. A little later the adjoining Raymer property was acquired and served as a temporary Student Infirmary. Within the year more adequate quarters have been provided in the Bradley Memorial Hospital and the new Student Infirmary. The newest capital building and the only one of great capacity erected in recent years is the building for Physics

and Economics which occupies the space next to the Chemistry Building at the west base of University Hill. It was opened in the fall of 1917. Appropriations for a virtual reduplication of University Hall and for the inauguration of halls of residence, with a union and commons for men, were made by the legislature of 1913, but were repealed by the "friends of the university" two years later.

One other addition to the campus should be mentioned, the bronze replica of Weinman's statue of Lincoln, presented in 1909, by Mr. Thomas E. Brittingham. This was placed in a significant position at the head of the Upper Campus, looking toward the State Capitol. "It is believed," wrote President Van Hise, "that the great character written in bronze on the rugged face of Abraham Lincoln will be an inspiring force to the many thousands of students who attend the university." It has been given recently a more fitting emplacement, and during the Commencement of 1919, Lincoln Terrace was impressively dedicated in connection with memorial services for the university men who fell in the war.

Many academic tendencies of the university are roughly implied in the above record of its material response and invitations to the growths of recent years. It remains to define these indications with somewhat greater exactness though not in such detail as will involve, except in rare cases, the mention of persons whose names are to be found in the current bulletins of the institution. The total growth of the university in the number of students in attendance has already been shown, and a full analysis of attendance may be found in Appendix A. One important change which is not thus indicated is the great increase of students

from outside the state. In this connection it will perhaps be sufficient to point out that during the ten years between 1904 and 1914 the total student fees received by the university increased about threefold, whereas, during the last eight years of that decade, the fees received from non-resident students increased tenfold, from $14,500 to $145,600. According to the report of the business manager for the year 1914-15, there were in residence 1,537 "alien" students, or about 30% of the total enrollment for the regular session of the university. A substantial increase of the non-resident tuition by the legislature of 1915 placed the expense of tuition at Wisconsin on a level with that of private institutions such as the University of Chicago and put Wisconsin on a basis in this respect which was radically different from that of all neighboring state institutions. Although this change produced no substantial decrease, it doubtless prevented a rapid increase, in the number of foreign students who thereafter entered the University of Wisconsin, especially for the first two years of the college course.

Another evidence of growing strength has been the increase in the number of students entering the undergraduate courses of the university with advanced standing. President Van Hise early made a point of friendly relations with the private colleges of the state and, in 1911, the normal schools of the state, with the full accord of the university, were authorized by the legislature to establish junior colleges. It was hoped that by these several agencies the university might be relieved to some extent from its growing burden of elementary instruction. This effect has been felt in some measure, but it has not yet become conspicuous. There is, moreover, a limit beyond which advanced credit can-

not be extended with good results. A considerable proportion of the students who enter from abroad are less adequately prepared for the work of the advanced years than those who have received their elementary training in the departments of the university. The same general tendency toward more advanced intellectual effort expressed itself in the growth of the Graduate School. At the time of its organization as a definite division of the university, in 1904, the Graduate School had an enrollment of 115 of whom 7 were in Engineering and 3 in Agriculture. The graduate enrollment reached its apex in 1914-15, when there were 492 graduates in attendance of whom 110 were in Agriculture and 17 in Engineering. In the meantime the attendance upon the Summer Session and the proportion of graduates in attendance during the summer had very rapidly increased, so that the grand total of the graduate enrollment for the year 1915-16 was 1,082. Since the highest number of doctorates conferred in any one year was 37 in 1916, it is evident that a large share of the graduate work has been of the continuation type leading to the M. A. degree, rather than the research type leading to the doctorate.

Although the university performed no small work, then, in training beginners in research, the main burden of investigation fell upon the developed men who constituted the faculty. I say "burden," advisedly; for, while it was an invigorating, it was an exacting—one is almost justified in saying an impossible—standard that Van Hise set for his faculty. It was not quite an impossible standard for in a measure his own achievement justified it. But its application was in considerable degree conditioned by the situation in which the university found itself at the beginning of his admin-

istration. Unquestionably his most passionate desire for the university was to see it become a great instrument for the advancement of knowledge. This, building upon the basic idea of service to the state, was the dominant conception of his rule. It was the ambition encouraged by the most far-seeing speakers at the Jubilee,—in the impassioned oration of Colonel Vilas, in the rounded address, full of astonishing prevision, of ex-President Chamberlin upon *The State University and Research*, and in the powerful pronunciamento of the president himself. It wrestled with democracy for the first place on the stage; the problem of Van Hise's administration was to reconcile the two. Beginning with the declaration in his *Inaugural* that he believed it to be the duty and the privilege of a state university, equally with any, "to add to the sum of human achievement," he called upon his faculty in the early years of his administration to bend up every corporal and spiritual agent to this arduous task. He urged them, by every legitimate form of pressure including that of example, to "produce." Except for the College of Agriculture, the university had not yet, nor was it likely to have for some time to come, resources that could be used specifically for the support of investigation. It followed that, if the university was to make immediate progress into this field it must lay upon every member of the faculty the double charge of instruction and investigation, and the president fortified this policy by giving his faculty very plainly to understand that he did not consider that teacher in the highest degree competent to inspire others with a true love of learning who was not himself a seeker after new knowledge.

Although this is, up to a certain point, sound doctrine, it is not to be accepted without important quali-

fications which the president, whatever he may have done in practice, did not in theory concede. In the first place, in spite of the noble recognition of the pre-eminence of creative power which was the basis of his passion for research and which caused him to carry his admiration for creative work into fields remote from his own, Van Hise did not sufficiently appreciate, I think, the difference which is so great that it is almost one of kind, between discovery in science or in the applied humanities and production in those fields which have been longer cultivated where there are required, on the part of the producer or even of the acceptable teacher, large processes of assimilation and reflection, and where too much haste in production can only lead to results that make the angels weep. Nor is it universally true that men who have the investigative gift are the most effective teachers, at least of under-graduates. And it is quite certain that, when an institution, which is primarily one of teaching, has thrown upon it the duties of elementary instruction on the part of the younger men and of administration on the part of their elders which fell to the lot of Wisconsin with the growth of all its colleges in this period, large achievements in investigation are impossible. This is sufficiently proved by the experience in the College of Agriculture where, the moment the collegiate course began to develop, it was complained that the opportunity for research was diminishing, and where, at the present time, it is recognized that duplicate professorships will have to be established in some departments if the work of research is to continue. One of the events which most thrilled President Van Hise in the whole course of his career as president, and through his appreciation thrilled others, was the discovery, upon the death of Colonel Vilas, in 1908, that

a magnificent private fortune had been left to the university for the endowment at some future time, of ten research professorships, with the *proviso* that not more than three hours of teaching each week might be required of the incumbents. But these qualifications are mere details. Even though we should prove that it was an impossible ideal which President Van Hise set before the faculty, it was none the less an inspiring one. If a few were stimulated to cheap production and mere advertising, it became the more general spirit of the institution to look for relief from instruction, not that a man might rest from his labors, but that he might be free to realize himself more fully,—to create. This was the great, the inestimable, gift of President Van Hise to the University of Wisconsin. For it was to a large extent through his determination that this spirit came to prevail so widely in the university. It was a gift which he made by precept and by example, by example more than by precept, for his conceptions distanced his powers of expression.

It is true that during the middle stretch of the period this great objective was obscured, obscured to such a degree that keen observers have thought they discerned in other directions the main set of the university. Coincident with the large material development from 1908 to 1913, came the sudden development of collegiate Agriculture which, with Home Economics, added a year or two later, produced in five or six years, from what had been a negligible factor in the central life of the university, a technical college of over eleven hundred students, and threw a mighty burden of elementary instruction upon the college of liberal arts. At the same moment and as a part of the same general temper began the demand for vocational training which was

answered by the formation of special courses within the college of liberal studies, where the way had been paved by the adoption, in 1903, of a free elective system leading to a uniform B. A. degree. At the same moment, too, came the introduction of university extension which was developed so rapidly and raised such a hideous racket that men of calm judgment have been bewildered into thinking it occupied the main tent. At the same time, also, the Medical School was quietly inaugurated. With respect to the last no one will question that it is a legitimate branch of university effort, though it promises, should it be extended so as to provide the full medical education, to become murderously expensive. The Medical School has been, from its inception, one of the strongholds of research in the university, partly because it has been manned with care to this end, and partly because the teaching required of its staff has been relatively light. There remain, then, for some explanation, as involving the question of university ideals, the engagement in university extension and the development of vocational courses.

The purpose of the university to be of direct practical service to the people of the state, "without regard to the preconceived notions of anybody, anywhere, concerning the scope of a university," in the words of Van Hise, was nowhere so manifest as in the daring swiftness with which university extension was added almost at a stroke to the capital activities of the institution. In this respect, as President Birge has said, "Wisconsin broke the way into a new and great field of university work," with the result that "the life and work of universities the country over have been permanently changed and enlarged." When this moribund department of university effort attracted Van Hise's atten-

tion, apparently for the first time in 1906, it had been languishing for a decade and the question arose whether it should be definitely abandoned or be revivified. In its earlier form university extension had depended almost entirely upon the principle of extending university influence to the communities of the state through public lectures by members of the regular staff of the university. It had broken down mainly because the average member of the faculty was unable or unwilling to put his matter into the form demanded by the usual popular audience and because even those who were acceptable as popular lecturers soon felt that the results obtained were altogether trivial compared with the hardships and the interruptions of university work which they entailed. In one department, in the College of Agriculture, the activities whose beginnings have been sketched in a preceding chapter had thrived with increasingly beneficent results. Here they had been kept alive by a body of men who had, as yet, almost no collegiate teaching, and who had virtually a new science, of immediate material value, to inculcate. It occurred to President Van Hise upon reflection—he speaks somewhere of the "slowly dawning realization"—that knowledge in general was constantly out-running the assimilation of the people. This soon became with him a leading thought, and it was in this thought that the new university extension was organized. The older idea of carrying university education beyond the confines of the institution was retained, particularly in the Correspondence Department; but there was added to this the new and very important idea of preparing and distributing knowledge for immediate use in the practical conduct of life. The distinction between university extension in this sense and "education proper" has been very clearly set forth by

President Birge. "This is not a matter of education proper either higher or lower, not a matter of teaching principles which the student will later apply in practice. It involves the transmutation of learning into such form that it can be directly used in the ordering of affairs. It means the extension of learning, the transmutation of science into practice, the application of knowledge to concrete problems of everyday affairs."

The Extension Division quickly became one of the largest, and from the nature of its activities—necessarily one of the most elaborately organized departments of the university. It has had, since 1907-8, its separate appropriations and budget, and its annual expenditures now approximate $300,000. This is in addition to about half that sum annually expended for similar purposes by the College of Agriculture. The association of its staff with the regular instruction of the university is almost negligible. In a certain sense, the Extension Division is not so much a department of the university as a special bureau of the state administered in close association with the university. That there is a definite advantage in this association, however, seems to be indicated by the practice in the College of Agriculture whose present management insists upon maintaining control of Agricultural Extension instead of permitting it to be absorbed by the general division.

The subject of vocational courses in relation to the general spirit of the university has already been touched on; but it must be reopened for slightly more definite treatment. The pronounced accentuation of the trend toward vocational courses moved President Birge, then dean of the College of Letters and Science, to take up the matter with great fullness in his biennial report of 1910. He pointed out that there were then seven

courses of this character in the college, of which four had been recently organized. These were the Courses in Journalism and Library Science, the Course in Chemistry, and the Course for the Training of Teachers. The Course in Home Economics, I may say, had been temporarily suspended and had just been added to the College of Agriculture. All of these courses, it was noted, were growing rapidly and were tending to increase their technical characteristics. Of 351 students in the senior class of the college, only 88 were not in such a course or affiliated with the professional schools of Law or Medicine. Commenting upon these facts, Dean Birge raised the warning that "it would be an incalculable loss, both to education and the state, if the college should come to consist of a mere congeries of courses for special training." "The state needs," he admitted, "in every profession not merely graduates provided with knowledge necessary for the skillful performance of their duties, but also, and even more, graduates who have some portion of the *esprit de corps* of the profession into which they are going. But," he continued, "it is necessary to remember that liberal education also has a spirit and temper of its own and that the cultivation of this spirit is the peculiar and highest function of a college of liberal arts and is its especial contribution to education and to the community. It must also be remembered that this spirit cannot be fully realized by those who are seeking technical ends any more than the spirit of professional training can be fully realized by those who are seeking liberal culture. . . . The only justification of the existence of a college of liberal arts is faith in the intellectual life as an end in itself, and the primary mission of the college to the community is the fostering and strengthening of the intellectual

life in its students, and so in the community. Nothing which seriously affects this service, however good it may be in itself, can be patiently accepted."

Since these words were written and before the problem which they were contemplating could be solved, the service of the university to the state has been interrupted by its service to the nation. We cannot now enter upon that story; it must suffice for the present to state that the university has no cause to be ashamed of the service that it rendered and that its sons rendered,—none greater than that of the strong and devoted leader whose life went out in the midst of the rejoicings of victory and just as he was bending his force to the tasks of peace.

And now, in these post-war days of doubtful peace and possibly of cynical revulsion, the university confronts once more the problem of what gift of knowledge it can best bring to the people of the commonwealth, and how. It is perhaps no portion of the historian's task to moralize or to solve the problems of the future; but he would hardly have finished his part if he failed to point out what recent events have shown: that no knowledge of the brute processes of life can suffice for the guidance of a people who have lost their way among spiritual ideas,—a lesson for educators.

Whatever be the solution which the university shall make of the problem which confronts it as it enters upon a new and, let us hope, an even greater era, may it not make the fatal mistake of leaving its people, as it too often finds them, pitifully helpless in the presence of ideas. Speaking in a broad way, this helplessness may be partly overcome by an acquaintance with those disinterested studies which, in the words of a great French scholar, "pursued in the same spirit in all civi-

lized countries, form—above restricted, and too often hostile nationalities—a *grande patrie* which is stained by no war, menaced by no conqueror, and where our souls find the rest and communion which was given them in other days by the City of God." And not rest only, but guidance!

APPENDICES

APPENDIX A

ANALYSIS OF ATTENDANCE, 1900–1918

	Let. and Sci.	Pharm.	Music	Med.	Engr.	Agric. long	Agric. Middle	Short and Dairy	Home Econ.	Law	Total	Twice Enum.	Total	Summer Session	Twice Enum.	Total	Grand Total
1900–01...	1,137	44	191	—	411	24	—	416	—	266	2,489	96	2,393	323	97	226	2,619
1901–02...	1,176	35	169	—	513	21	—	427	—	260	2,601	76	2,525	367	115	252	2,777
1902–03...	1,232	35	126	—	585	36	—	425	—	226	2,665	76	2,589	410	129	281	2,870
1903–04...	1,312	*	172	—	744	60	—	465	—	201	2,954	76	2,878	400	127	273	3,151
1904–05...	1,476	—	153	—	804	87	—	439	—	183	3,142	71	3,071	403	132	271	3,342
1905–06...	1,579	—	209	—	768	143	—	485	—	154	3,338	96	3,242	528	199	329	3,571
1906–07...	1,579	—	191	—	799	150	—	472	—	165	3,356	95	3,261	568	170	398	3,659
1907–08...	1,737	—	150	25	921	160	—	534	—	157	3,684	99	3,585	661	233	428	4,013
1908–09...	1,909	—	114	32	896	215	35	609	—	165	3,975	72	3,903	1,026	408	618	4,521
1909–10...	2,192	—	143	49	781	277	74	561	52	159	4,288	82	4,206	1,128	387	741	4,947
1910–11...	2,425	—	74	47	807	402	100	611	100	148	4,714	34	4,680	1,263	434	829	5,509
1911–12...	2,447	—	74	57	728	508	101	557	134	158	4,764	92	4,672	1,537	495	1,042	5,714
1912–13...	2,462	—	76	66	678	579	107	585	165	167	4,885	99	4,786	1,746	598	1,148	5,934
1913–14...	2,653	—	95	82	738	682	135	633	205	169	5,392	116	5,276	2,132	686	1,446	6,722
1914–15...	2,970	—	102	96	733	730	146	639	250	181	5,847	118	5,729	2,599	770	1,829	7,558
1915–16...	3,159	—	92	103	677	610	133	568	274	184	5,800	135	5,665	2,784	859	1,925	7,590
1916–17...	3,417	—	108	133	657	549	104	476	276	190	5,910	153	5,757	3,128	801	2,327	8,084
1917–18...	2,914	—	97	126	552	313	44	289	263	82	4,680	139	4,541	2,334	542	1,792	6,333

* Included in L. and S.

APPENDIX B

BUILDINGS OF THE UNIVERSITY OF WISCONSIN

Date	*Building*	*Cubic Ft. Gross*	*Cost of Const.*	*Cts. per Cu. Ft.*
1851	North Hall	331,655	20,000	6.
1855	South Hall	331,650	21,000	6.4
1855	Hse. of Director of Astronomy	110,000	5,000	4.5
	Total	441,650	26,000	
1857	University Hall	682,500	63,200	9.3
1871	Chadbourne Hall (Women's Dormitory)	454,950	135,000	17.4
1875	Old Science Hall (Burned 1884)	1,452,306	120,000	8.2
1878	Washburn Observatory	236,250	42,000	17.7
1879	Music Hall (Formerly University Library)	780,000	40,000	5.1
1880	President's House	130,378	12,000	9.2
1880	Student Observatory	7,980	800	10.
	Total	138,358	12,800	
1887	Chem. Eng. Bldg. (Old Chemistry Bldg.)	450,000	65,000	14.4
1887	Mining Engineering Lab. (Old Heating Station)	245,700	25,000	10.2
1887	Engineering Laboratory	865,125	45,000	5.2
	Total	1,560,825	135,000	
1888	Science Hall	1,751,310	285,000	16.3
1892	Dairy Building (Hiram Smith Hall)	300,000	40,000	13.3
1893	Law Building	401,625	87,000	21.6

Date	*Building*	*Cubic Ft. Gross*	*Cost of Const.*	*Cts. per Cu. Ft.*
1894	Soils Physics (Old Horticultural Hall)	123,750	18,500	15.
1894	Greenhouse	37,500	6,000	16.
1894	Gymnasium and Armory	1,640,500	130,000	7.8
	Total	1,801,750	154,500	
1896	Pump House	14,375	2,000	14.
1896	Addn. to Chadbourne	320,310	65,774	17.4
1896	Addn. to Soils Physics Bldg.	123,750	18,500	15.
1896	Grand Stand	277,760	4,500	1.6
	Total	736,195	90,774	
1897	Hse. Dean Agric.	92,400	10,000	10.8
1897	Dairy Barn	603,900	20,000	3.3
	Total	696,300	30,000	
1900	Farm Dormitory	51,600	2,400	4.6
1900	Hse. Farm Supt.	50,400	2,400	4.7
1900	Horse Barn	301,600	12,000	4.
1900	South Wing Univ. Hall	518,320	65,000	12.5
1900	State Hist. Library	1,410,000	750,000	53.1
	Total	2,331,920	831,800	
1901	Ag. Heating Station	162,500	37,000	16.
1901	Engineering Bldg.	746,144	100,000	13.4
	Total	908,644	137,000	
1902	Agri. Hall and Auditorium	1,041,000	150,000	14.8
1903	Tank House	49,920	3,000	6.
1903	Hog Barn	150,000	6,000	4.
1903	Boat House	236,250	5,000	2.1
	Total	436,170	14,000	
1905	Chemistry Bldg.	1,420,400	116,000	8.2
1906	Agronomy Bldg.	193,536	27,760	14.3
1906	North Wing Univ. Hall	518,320	74,200	14.3
1906	Hydraulic Laboratory	211,680	28,400	13.5
1906	Agric. Eng. Building	345,000	41,640	12.
1906	Administration Bldg.	93,450	17,000	18.
	Total	1,361,986	189,000	

1907	Tobacco Barn	36,000	1,000	2.8
1908	Tunnels		93,840	
1908	Stock Pavilion	1,260,000	75,000	6.5
1908	Cen Heating Station	1,011,500	105,000	10.3
	Conveyors, Boilers, etc.		110,400	
	Total	2,271,500	384,240	
1909	Dairy Laboratory	144,377	20,000	11.
1909	Lathrop Hall	1,476,000	190,000	13.
	(Women's Gymnasium)			
1909	Litter Shed	58,320	1,426	2.4
1909	Forest Prod. Laboratory	573,600	50,000	8.5
1909	Lincoln Statue Base	492	1,500	30.5
	Total	2,252,789	262,926	
1910	Horticultural Bldg.	325,632	50,000	15.4
1910	Horticultural Greenhouse and Potting House	169,464	17,500	10.1
1910	Poultry House	50,400	4,500	8.9
1910	Hill Farm Barn	72,000	5,000	6.9
1910	Wagon Shed	54,198	1,500	2.8
1910	Sheep Barn	100,100	5,377	5.3
1910	Crematory	17,100	2,000	11.7
	(Now Serum Laboratory)			
1910	Implement Shed	45,198	929	2.
1910	Engineering Wing	277,038	37,683	13.6
1910	Gas. Prod Laboratory	24,780	2,000	8.
1910	Biology Bldg. and Auditorium	1,198,450	200,000	16.7
1910	Cornelius House	47,600	3,000	6.4
	(Alumni Headquarters)			
	Total	2,381,960	329,489	
1911	Gymnasium Annex	309,112	15,000	4.85
1911	Service Building	297,375	25,000	8.4
	Total	606,487	40,000	
1912	Addn. to Hort. Greenhouse...		1,700	
1912	Electric Light Plant		20,200	
	(In Central Heating Station)			
1912	West Wing Chemistry Bldg...	545,232	72,150	13.2
1912	Clinical Bldg (Old Part)....	59,120	12,900	
1912	Clinical Bldg (New Part)...	61,200	12,100	19 8
1912	Barnard Hall	647,683	123,500	19.07
	(Women's Dormitory)			
1912	Home. Ec. and Univ. Ext. Building	746,232	119,000	15.9

APPENDICES

		Cubic Ft. Gross	Cost of Const.	C p Cu.
	[illegible]	123,750	18,500	15
	[illegible]	37,500	6,000	16.
	[illegible]	1,640,500	130,000	7.
	[illegible]	1,801,750	154,500	
	[illegible]	14,375	2,000	14.
	[illegible]	320,310	65,774	17
	[illegible] Bldg.	123,750	18,500	15.
	[illegible]	277,760	4,500	1.6
	[illegible]	736,195	90,774	
	[illegible]	92,400	10,000	10.8
	[illegible]	603,900	20,000	3.3
	[illegible]	696,300	30,000	
	[illegible] Dormitory	51,600	2,400	4.6
	[illegible] Supt.	50,400	2,400	4.7
	[illegible] Barn	301,600	12,000	4.
	[illegible] ng Univ. Hall	518,320	65,000	12.5
	[illegible] Library	1,410,000	750,000	53.1
	[illegible]	2,331,920	831,800	
	Ag. Heating Station	162,500	37,000	16.
	Engineering Bldg.	746,144	100,000	13.4
	Total	908,644	137,000	
1902	Agri. Hall and Auditorium	1,041,000	150,000	14.8
1903	Tank House	49,920	3,000	6.
1903	Hog Barn	150,000	6,000	4.
1903	Boat House	236,250	5,000	2.1
	Total	436,170	14,000	
1905	Chemistry Bldg.	1,420,400	236,000	6.2
1906	Agronomy Bldg.	[illegible]	[illegible]	[illegible]
1906	North Wing Univ. Hall	[illegible]	[illegible]	[illegible]
1906	Hydraulic Laboratory	[illegible]	[illegible]	[illegible]
1906	Agric. Eng. Building	[illegible]	[illegible]	[illegible]
1906	Administration Bldg.	[illegible]	[illegible]	[illegible]
	Total	[illegible]	[illegible]	[illegible]

1907	Tobacco Barn	36,000	1,000	2.8
1908	Tunnels		93,840	
1908	Stock Pavilion	1,260,000	75,000	6.5
1908	Cen. Heating Station	1,011,500	105,000	10.3
	Conveyors, Boilers, etc.		110,400	
	Total	2,271,500	384,240	
1909	Dairy Laboratory	144,377	20,000	11.
1909	Lathrop Hall	1,476,000	190,000	13.
	(Women's Gymnasium)			
1909	Litter Shed	58,320	1,426	2.4
1909	Forest Prod. Laboratory	573,600	50,000	8.5
1909	Lincoln Statue Base	492	1,500	30.5
	Total	2,252,789	262,926	
1910	Horticultural Bldg.	325,632	50,000	15.4
1910	Horticultural Greenhouse and Potting House	169,464	17,500	10.1
1910	Poultry House	50,400	4,500	8.9
1910	Hill Farm Barn	72,000	5,000	6.9
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1910	Sheep Barn	100,100	5,377	5.3
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1910	Implement Shed	45,198	929	2.
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	Total	606,487	40,000	
1912	Addn. to Hort. Gr...		1,700	
1912	Electric Light Pla...		20,200	
	(In Central Heati...			
1913	West Wing Chem...	545,232	72,150	13.2
1913	Cir... Bldg. (...	59,120	12,900	
1913	...	61,200	12,100	19 8
	...	647,683	123,500	19.07
	... Ext.			
	...	746,232	119,000	15.9

Date	*Building*	*Cubic Ft. Gross*	*Cost of Const.*	*Cts. per Cu. Ft.*
1912	N. W. Wing State Historical Library	281,580	61,260	21.8
	Total	2,341,047	422,810	
1913	Agr Chemistry Bldg.	658,249	83,363	12.66
1913	Serum Laboratory	44,576	2,083	4.6
1913	Hog Barn	50,000	3,882	7.7
1913	Applied Arts Laboratory (Olin Barn) (For Addn. see page 7)		1,000	
1913	Central Kitchen	102,930	13,710	13.33
1913	Wis High School	899,828	118,298	13.15
1913	Addn. to Agric. Library	29,203	5,462	18.7
	Total	1,784,786	227,798	
1914	Hog Barn	24,480	1,638	6.6
1915	Exper Breeding Barn	60,684	3,000	5.
1915	Hog Cholera Serum Plant	36,864	4,810 (Inc. Equip.)	13.
1915	Reservoir at Hydraulic Laboratory	42,474	5,200	12.25
1915	Automobile Shelter	8,640	600	5.8
1915	Applied Arts Laboratory	4,334	3,500	8.0
	Total	152,996	17,110	
1916	Physics Building (Also Commerce and Economics)	1,323,012	180,775	13.3
1916	Soils Physics Building	333,843	49,249	15.9
1916	Completion of base of Lincoln Statue	22,123	9,000	40.7
1919	Bradley Memo.	264,070	69,990	26.1
1919	Infirmary	261,170	69,455	26.6

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(Prepared by Dr. Louise P. Kellogg, W.H.S.)

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